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ATTITUDES TOWARDS MENTALLY ILL IN PROFESSIONALS WORKING IN NDERA NEUROPSYCIATRIC HOSPITAL IN RWANDA

By

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DEDICATION

First of all, I want to dedicate this research to God, and to Jesus Christ, my guiding light

With my deepest love and appreciation to my soul mate, best friend, and wife Rose Marie Alice UMUBEYI, for her patience, love, encouragement, and tolerance during some of the most tempestuous and frustrating times during the completion of my research.

To my beloved and wonderful children: Alain Bruno SHEMA, and Aubert Arnaud HIRWA, for their patience with me while I was struggling to maintain work, family, and the completion of this research.

ABSTRACT

This quantitative study investigated the attitudes toward the mentally ill in professionals working in Ndera neuropsychiatric hospital.

The research questions explored were centered on the attitudes of directly involved and supportive professionals toward mentally ill clients and also on the difference between the attitudes of directly involved and supportive professionals toward mentally ill clients and demographic variables.

The purpose of this study was to determine whether there are differences in attitude between direct care providers and supportive professionals toward the mentally ill clients.

The Community Attitudes towards Mentally Ill (CAMI) scale (Dear & Taylor, 1982; Taylor, Dear & Hall, 1979; Taylor & Dear, 1981) was used.

A total of 72 members of the staff, including 55 directly involved staff and 17 supportive staff members, participated in the survey.

A summary interpretation of the main findings in this thesis reinforces the assumption that negative attitudes towards people with mental illness received in Ndera neuropsychiatric hospital are in existence, even though the majority have favorable attitudes towards the mentally ill.

This suggests that persons with mental illness may encounter stigmatizing attitudes from mental health professionals.

This study represents one of the first to explore professionals' attitudes towards the mentally ill. It is hoped that this work will highlight the need to explore the influence of attitudes in the delivery of high quality healthcare. The provider–patient relationship is at the heart of effective treatment and the detrimental impact of prejudicial judgments on this relationship should not be ignored.

This study also demonstrates that professionals with different roles report different attitudes and this suggest that they would behave differently towards patients with mental illness.

The directly involved professionals have been found to have more positive attitudes than the supportive professional and this seems to show that as individuals improve their ability to interact with persons with mental illness, they become more tolerant.

The present study demonstrates that the sociodemographic variables tested have no impact on the attitudes of the professionals working in Ndera neuropsychiatric hospital.

The extent of mental health training (as part of general health training) and duration of experience of working in mental health settings did not influence attitudes.

Finally, this study demonstrates that there is no correlation between the attitudes towards mentally ill patients and their inclusion in the process of decision-making.

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CHAPTER 1: RESEARCH QUESTION

1.1. Introduction

Ndera Neuropsychiatric hospital was founded by the Congregation of Brothers of Charity, on the July 4th, 1968.
Before the Nation's Independence (July 1st 1962), the mentally ill patients were sent to Bujumbura (Burundi) where a psychiatric unit was functional in Prince Regent Charles general hospital.
After 1962, Rwandan leadership contacted the Brothers of Charity to find a solution to the problem of mentally ill who were wandering in the streets of the country. It was in 1968 that a convention was signed and construction started that year. The first patient was hospitalized in 1972 and the capacity was about 60 beds.
From 1968 to 1994, infrastructures and personnel increased remarkably. An annex has been created in the south of the country and mobile teams have been created to reach the patients living in the interior of the country.
During the 1994 genocide against the Tutsi, the hospital and its infrastructure were demolished, the personnel killed and equipment stolen.
In 1995 and 1996, in collaboration with the Swiss Cooperation, and Belgium Cooperation, the hospital was rehabilitated, the new personnel trained and the hospital equipped.
After the hospital restarted its activities in 1996, the number of patients keeps increasing considerably and new services are being envisioned (Drug abuse unit, child psychiatry, and clinical psychology, psychiatric HIV Unit…) to respond to the needs of the Rwandan population which continues to live with the scars of 1994 genocide against the Tutsi.
In addition, the government of Rwanda decided to integrate mental health care in the general health care. By then, all district hospitals started a mental unit run by a psychiatric nurse and/or a psychologist. However, patients continue to increase in the hospital, either in the outpatient department or in the inpatients wards.

1.2. Statement of the problem

Till 1960s, the large institutions were the focus of psychiatric treatment; the reforms in 1960s brought deinstitutionalization which is, in other words, the end to the rigid regimens and dehumanization of patients associated with many large institutions.

However, in many areas, there have been resistances to establishment of group homes, or community treatment facilities, for mentally ill patients.

Health care providers have been known to stigmatize patients who use psychiatric medications or services by offering discouraging advice, disparaging remarks, and

rejecting behavior. This form of discrimination may have a negative impact on patients' self-esteem and the way they seek help or adhere to prescribed medical treatments.

Health care providers, either in the community or in the hospitals, have the opportunity to influence patients' perception of their mental illness. Consequently, negative attitudes that manifest as apprehension or discomfort during patient interactions may lead to ineffective counseling or the lack of essential medical services.

The knowledge of such attitudes is not only germane to those concerned with the origins and maintenance of disturbed behavior, but critically important to workers involved in primary prevention programs, early intervention, and community treatment of psychiatric patients.

Both administrators and clinicians benefit from acquaintance with public attitudes towards the presence of psychiatric facilities in their neighborhoods.

In addition, the planners have to know discrepancies between what people say and what they do.

To our knowledge, no study has directly examined the attitudes of mental health professionals in Rwanda. There are, hence, no data on the interactions between psychiatric users and professionals.

Before the 1960s, mental disorders were managed within the community by the traditional healers and then by the church. This permitted maintenance of the mentally ill at the level of the community, in their families without being stigmatized.

In 1968, the only psychiatric hospital was established with the mission to treat all psychiatric cases of the country.

From that time, all the mentally ill patients were referred to Ndera for care. It was difficult to find a patient treated either in the community or in the district hospitals.

With the 1994 genocide, families have been destroyed, and psychosocial problems increased in number. The number of people who consulted the services at the Ndera neuropsychiatric hospital increased as well.

Many attempts to find solutions to the problem of delivery of mental health services to mentally ill Rwandans have been tried. Mobile teams have been created but with little success. Psychiatric nurses, psychiatrists and other doctors have been trained. Nevertheless patients continue to be increasingly hospitalized. Some patients are hospitalized for long periods, and some are not reintegrated well within the society. In addition to this, some patients reported the violations of their basic human rights.

1.3. Study questions

This research was guided by the following questions:

1. What are the attitudes of directly involved and supportive professionals toward mentally ill clients?
2. Is there a difference between the attitudes of directly involved and supportive professionals toward mentally ill clients and demographic variables (including levels of training, occupation, years of experience, and academic discipline)?

1.3. Hypotheses

1. Directly involved professionals' attitudes toward the inclusion of persons with psychiatric disabilities will be more positive than supportive staff's attitudes.
2. Directly involved professionals will have a stronger belief in the need to include consumers in the decision-making process about their future than the supportive staff workers.
3. Professional background variables (including academic discipline, levels of training and experience, amount of contact, and occupation) have an effect on directly involved and supportive professionals' attitudes toward mentally ill patients.

1.4. Specific objectives.

- To establish the attitudes, the views and reactions of the Directly involved staff (including nurses, doctors and social workers) and those who are not the part of that category, towards the mentally ill people.
- To identify factors which influence the attitude of nurses' towards the mentally ill in Ndera Neuropsychiatric Hospital.

1.5. Significance of the study

If attitudes towards the mentally ill by directly involved professionals (including nurses, doctors and social workers) and those who are not part of that category are significantly negative then it could be posited that by increasing the availability of resources, services, and information related to mental health, more mentally ill patients will receive the best quality of care.

This study focuses on professionals at the Ndera neuropsychiatric hospital in Rwanda. Such a specialized focus is useful because it provides an opportunity to investigate the unique mental health attitudes and issues of this population. Even with this narrow focus, there is still some degree of variability, due to such factors as level of education, psychiatric background, and working experience in mental health.

1.6. Purpose of the study

The purpose of this study was to determine whether there are differences in attitude between direct care providers and supportive professionals toward the mentally ill clients. The Community Attitudes towards Mentally Ill (CAMI) scale (Dear & Taylor, 1982; Taylor, Dear & Hall, 1979; Taylor & Dear, 1981) was used.

1.7. Basic assumptions

Two basic assumptions were made in conducting this investigation.
First,
it was assumed that directly involved staff and supportive professionals who participated in this study have awareness and understanding of the concept of mental health care.
Second, it was assumed that MH and supportive professionals who participated in this study would be honest and accurate in their responses to the questionnaire on attitudes.

1.8. Limitations of the study

There are a few limitations expected in this research and they include:

- As with every other survey the fact that participants may not be very accurate in answering the questionnaires is observed.
- Even though the whole population of 12 doctors, 90 nurses and 15 social workers and 90 support professionals working at Ndera neuropsychiatric hospital is targeted in the study, a few participants may not be available during the time of the study.
- Attitude towards the researcher; researcher being a member of the group proposed for this study, participants may feel hesitant to reveal true information on the questionnaires for fear of exposure.

CHAPTER 2: REVIEW OF THE LITERATURE

2.1. Rwanda at a glance

Rwanda is a small, landlocked country with an area of 10,169 square miles, of which 7,229 square miles are usable. It is located in the heart of Africa with Democratic Republic of Congo to the west, Uganda to the North, Burundi to the south, and Tanzania to the east. It enjoys a mild climate, with an average temperature of 64°F. Rwanda's soil is generally good for agriculture.

The Rwandan people live in communities that are dispersed over many hills, some of which are not easily accessible. Rwanda is one of the African countries where the incidence of HIV/AIDS is reaching alarming proportions and this particularly concerns mental health services. Mental patients are at risk for HIV/AIDS, while HIV may also be a factor in the incidence of mental and neurological disorders.

Rwanda knew in 1994, a very serious genocide, during which almost 1,000,000 people were killed in only 100 days.

One can assume that many people in the population have been exposed to traumatic events as defined in DSM IV-TR.

These events psychologically affected Rwandans and created several problems for individuals, their families and also their surroundings. The situation made an impact on the mental health of the population in Rwanda to the extent that the people consulting the Ndera neuropsychiatric hospital keep increasing every year.

Conflict between folk (traditional) and scientific (western) treatment views of the etiology and treatment of mental disorder exists in both developing and industrialized nations. Briefly, in traditional Rwandan culture, an illness is not simply the result of malfunctioning of an organ. Nor is it injury to an organ from an outside physical cause. It is essentially a break in the harmony of one's life, attributed to either a physical problem created by a magical power, or an intangible force such as God, local spirits, or ancestral spirits. In Rwanda , therapeutic rituals are often addressed to Ryangombe, a divinity who is the source of peace, love and fertility.

In western terms, traditional medical practitioners employ a holistic approach, treating the patient's symptoms, as well as looking for causes in the physical and spiritual worlds. Unlike the western mechanistic model, no distinction is made between somatic and psychic factors.

2.2. Importance of attitude

The attitude of a person toward a certain object (person, word, or behavior) can be defined as a subjective evaluation of this object (Herkner, 1993). The subjective value of an object can be negative, neutral or positive. The objects of a person's attitude are not isolated elements; they exist in a complex relationship.

Attitudes –as well as all other cognitions- can therefore be understood as semantic networks in which singular knots are connected by relationships. An attitude towards a

certain object depends on attitudes to other objects related to it. Attitudes include cognitive and affective components (Herkner, 1993).

The role that attitudes of nondisabled persons play in the lives of people with disabilities is an important area to understand because negative attitudes might limit the integration of disabled people in the community. Studying the attitudes of health care professionals is important because the presence of negative attitudes might present barriers to treatment services as well as negatively affect the social developmental process for persons who are disabled.

2.3. The African Concept of mental health

Africa is a continent that is culturally diversified. Although there are cross-cultural and ethnic differences amongst the people of Africa, there is nonetheless a general belief among Africans that both physical and mental diseases originate from various external causes such as a breach of a taboo or custom, disturbances in social relations, hostile ancestral spirits, spirit possession, demonic possession, evil machination, evil eye, sorcery, natural causes, and affliction by God or gods (Betancourt et al., 2000; Gaines, 1998; Idemudia, 2004; Okafor, 2009; Thomas, 2008). According to Taussing (1980), the most important thing about society is the relationship between people, and as a result we need to recognize the human relationship embodied in symptoms, signs, and therapy. Pearce (1989) also argues "it is too simplistic to see disease as something physical, which attacks the body". According to him, disease causation can be due to "things we see and things we don't see." Many of the things we do not see are included in the African belief system such as cultural and social values, philosophies, and expressions. The common element in the African belief system is simply that physical and mental illness are the result of distortions or disturbances in the harmony between an individual and the cosmos, which may mean family, society, peers, ancestors, or a deity.

2.4. Definition of terms

2.4.1. Mental Health

Though many elements of mental health may be identifiable, the term is not easy to define. The meaning of being mentally healthy is subject to many interpretations rooted in value judgments, which may vary across cultures. Mental health should not be seen as the absence of illness, but more to do with a form of subjective well-being, when individuals feel that they are coping, fairly in control of their lives, able to face challenges, and take on responsibility. Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity specific to the individual's culture.

2.4.2. Mental Health Problems

The vast majority of mental health problems are relatively mild, though distressing to the person at the time, and if recognized can be alleviated by support and perhaps some professional help. Work and home life need not be too adversely affected if the appropriate help is obtained. In the analysis of situations, the terms mental health problems and mental health difficulties are used interchangeably.

2.4.3. Mental Illness

Mental illness refers collectively to all diagnosable mental health problems which become "clinical," that is where a degree of professional intervention and treatment is required. Generally, the term refers to more serious problems, rather than, for example, a mild episode of depression or anxiety requiring temporary help.

The major psychotic illnesses, such as endogenous depression, schizophrenia, and manic depressive psychosis, would fall in this category and would be seen less often in the workplace. Mental illness is sometimes referred to as psychiatric disability. This term is used primarily in the United States.

2.4.4. Mental Disorders

Mental disorders are health conditions characterized by alterations in thinking, mood or behavior (or some combination thereof) associated with distress and /or impaired functioning. Mental disorders are associated with increased mortality rates.

The risk of death among individuals with a mental disorder is several times higher than in the population as a whole.

2.4.5. Rehabilitation

A process aimed at enabling persons with disabilities to regain and maintain their optimal physical, sensory, intellectual, psychiatric, and/or social functional levels, by providing them with tools to change their lives towards a higher level of independence.

Rehabilitation may include measures to provide and/or restore functions or compensate for the loss or absence of a function or for a functional limitation. The rehabilitation process does not involve initial medical care. It includes a wide range of measures and activities from more basic and general rehabilitation to goal-oriented activities, for instance vocational rehabilitation

2.4.6. Stigma

Stigma can be defined as a mark of shame, disgrace, or disapproval, which results in an individual being shunned or rejected by others. The stigma associated with all forms of mental illness is strong but generally increases the more an individual's behavior differs from that of the 'norm.'

2.5. Literature on Attitude

2.5.1. Attitude Structure

Historically, scientific study of attitude has focused on the general relationship between attitude and behavior. Though attitude is not observable and hence, difficult to be defined, it is important to study and understand attitudes because 1) Attitudes guide our thoughts, 2) Attitudes influence our feelings, and 3) Attitudes affect our behavior (Myers, 1990, p.90 cited by J.E., Bullock, 2002, p.14)

The structural model of attitude that will be used in this research is the Theory of Reasoned Action (TRA). This model was developed by Fishbein (1980), and the theory is based on the idea that the proximal cause of behavior is intention to behave, which is caused by attitude and subjective norms... (p. 47). Fishbein further states that attitude is the target person's opinion about whether the behavior is positive or negative, and a subjective norm is the target person's perception of social pressure from significant others to perform the behavior they ought to do. (p.47). Attitudes and subjective norms are determined by beliefs about the consequences of the behavior and beliefs about the opinions of specific importance to others.
The TRA model builds on a history of attitude research that occurred in three phases: 1) issues of measurement and relation to behaviors; 2) dynamics of individual attitude change; and 3) understanding the structure and function of attitudes (Hogg & Terry, 2000).

Other researchers have contributed to the expansion of the TRA model by adding the tenet that behavior can result from less intentional processes such as previous behavior, habit, and perceived behavior control (Ajzen, 1988; Bentler and Speckart, 1981). However, Fishbein (1980) and others (e.g., Ajzen, 1988; Bentler & Specart, 1981; Triandis, 1980) have demonstrated numerous times that the two key components in determining behavior are attitudes and subjective norms. According to Trafinow and Fishbein (1994), in the TRA model, most behaviors can be classified under attitudinal control (AC) and to an extent under normative control for most people. (p.51). Trafinow and Frishbein go on to state that attitudes are global judgments about behavior (positive or negative), and subjective norms are the target person's judgments about what others who are important think he or she should do. Bagozzi, Baumgartner, & Yi (1992) conducted a study demonstrating that action-oriented people have greater tendencies toward attitudinal control. Action-oriented people are those who decide what they want to do, and then do it. Conversely, normative control (NC) people tend to go along with what other people want to do. Whether action-oriented or normative control, people differ in the degree to which they are under attitudinal control or normative control.
Finally, several researchers (Fishbein & Ajzen, 1975; Rosenberg & Hoveland, 1960; Triandis, 1971) introduce the tripartite components (affect, cognitive, behavior) that build

on the idea that beliefs affect the formation of attitudes and subjective norms in the TRA model.

According to Ajzen (1993), the tripartite components develop from beliefs that people have about the object of the attitude. The cognitive component of attitude refers to the individual's ideas, beliefs, or opinions about the attitude referent. The affective component of attitude refers to the feeling or emotional underpinnings of the attitude. The behavioral component refers to the individual's intent or readiness to behave in a certain manner with respect to the attitude object. (Joseph Edward Bullock, Jr., 2002)

2.5.2. Attitude Formation

Numerous theoretical propositions regarding this topic of attitude formation exist in the literature. For example Fishbein & Ajzen (1975) stated that attitudes are formed by information processing and they develop from those beliefs that people have about the attitude object. Later, another researcher, Arvey, demonstrated the genetic basis of attitudes after finding that identical twins raised in different environments had similar attitudes (Arvey, 1989). According to Myers in 1990, attitudes are learned through mere exposure, conditioning, and socialization. This theory is more widely accepted by psychologists and social scientists. Socialization refers to acquisition of language, values and attitudes gradually through reinforcement, observation and learning processes (Forsyth, 1995). Attitudes can also be acquired from others through social learning in the form of classical conditioning, modeling, and direct experience.

Baron & Byrne (1994) described that classical conditioning can be defined as "learning through association process". This occurs when one stimulus regularly precedes another. The one that occurs first may soon become a signal for the one that occurs second (Baron & Byrne, 1994).

Banduras (1969) developed the "social learning theory". This theory states that behaviors and attitudes are acquired by observing and imitating the actions displayed by parents and peers.

Finally, according to Bornstein (1989), direct experience can be acquired from exposure to a particular object. Direct experience repeated over time results in a preference for or against that object as compared to objects experienced less frequently. The more familiar the object or task, the more we generally like it (Bornstein, 1989). In another example, Fazio & Zanna (1981) demonstrated that attitudes that are experience-based are more readily accessed in memory.

They went on to say that direct experience produces a well-defined and certain attitude. These, in turn, enhance that attitude's capacity to predict later behavior.

The area of attitudes toward persons with disabilities has also become a focus in research. Livneh (1982) reported that some researchers went a step further by seeking a specific cause for negative attitudes toward disability. Subsequently, a plethora of empirical work has been focused on the goal of supporting a specific cause or root basis for negative

attitudes toward persons with disabilities. According to Nagler (1993) the process of forming attitudes toward persons with disabilities is related to biases, stereotypes, and stigma (1993).

Work on attitudes towards people with disabilities appears not to have begun until after disability rights laws were enacted in the early seventies (Nagler, 1993). Moreover, much of the early work focused on relationships between contact (with nondisabled persons) and reaction. Others, such as Rabkin (1975), focused on the perceived roots of prejudicial attitudes toward the disabled by developing classification systems. Gellman (1959), for example, perceived the roots of prejudicial attitudes as belonging in the following categories: 1) social customs and norms; 2) child-rearing practices; 3) recurrence of childhood fears in frustrating/anxiety-provoking situations; and (4) discrimination-provoking behavior by persons with disabilities. Rabkin (1975) later developed a fourfold classification system he categorized as follows: 1) psychodynamic factors; 2) situational factors; 3) sociocultural factors; and (4) historical factors. These and other models contributed to a growing focus on attitude formation in the area of attitudes toward persons with disabilities.

The research results of several studies (e.g., Heinemann, Pellander, Vogelbusch, & Wojtek, 1981; Yuker, Block, & Young, 1970) demonstrated a link between degree of contact or proximity to disabled persons and attitudes toward them. The term contact can be narrowly defined as a situation in which interaction has actually taken place between disabled and nondisabled persons (Makas, 1993).

Makas (1993) went on to say that the critical flaw in past research regarding persons with disabilities was the lack of a clear definition for contact as well as researchers' inattentiveness to factors associated with contact. In order to develop a full understanding of the impact of contact between nondisabled and disabled persons, the type of contact needs to be clearly defined. For example, Makas (1989) reviewed studies that attempted to assess the relationship between contact and attitude and found that most of the questions about contact "were primitive and based on a priori assumptions". (p. 124).

As mentioned earlier, contact has been recognized as a powerful influence on attitude formation, and high levels of contact are generally associated with positive attitudes. However, contact is not necessarily positive in and of itself. In fact, a number of studies suggest that unguided contact (distress and deficiencies highlighted) with persons with disabilities has resulted in no attitude change or negative attitudes (Gething, 1982; Lyons & Haynes, 1993). One explanation for the relationship between contact with people with disabilities and attitude formation is a concept called in-group individuation and stereotyping of out-group members.

Makas (1993, p. 129) espoused the idea that "negative attitudes may be the result of illusory correlations between deviant persons and deviant behaviors".

Furthermore, she described the concept of in-group individuation as follows:

> *Individuals seek to increase identification with their own group and to distance themselves from other groups. This unconscious behavior can lead to contrast and assimilation biases in cognitive processing in which people fail to acknowledge differences that exist between groups. The contrast and assimilation biases work together to allow an individual to strengthen her/his feelings of cohesiveness with the "in-group" and distance from the "out-group" (p. 129).*

Another investigator (Wills, 1978) found that professionals (e.g., social workers, rehabilitation counselors, medical professionals) have obvious contrast and assimilation biases toward their clients. Wills reported that a majority of studies on this topic (e.g., Elliott, 1990; Yuker, 1988) found that professional helpers hold more negative attitudes toward people with disabilities than does the general public. Wills attributed this finding to the service providers' need to perceive two entirely separate groups - the helpers and the clients-in order to assure the cohesiveness of their (the service providers) own group (p. 129).

Livneh (1982) describes a more complex origin of negative attitudes toward persons with disablilities. According to Livneh (1982), sources of negative attitudes toward persons with disabilities occur along six dimensions that include sociocultural-psychological, affective-cognitive, conscious-unconscious, past experience-present situation, internally originated-externally originated, and theoretical-empirical. Examples of the sociocultural dimension include perceptions of the physical body, personal appearance, personal achievement, and productivity in employment.

But Livneh (1982) states that the biggest factor for the sociocultural dimension is "status degradation to being disabled" (pg. 36).

Status degradation is most often drawn from the stigma of having a disability and being treated as an outsider. Opposite to the sociocultural dimension are characteristics typically used to describe the psychological dimension. Examples of the sociocultural dimension include the association of many unrelated negative attributes to a person who has one specific physical or mental disability characteristic. The psychological dimension might also include associations related to a nondisabled person's expectation that the disabled person mourns or grieves the loss of a body function or part in order to safeguard her or his own (the nondisabled group's) values about the importance of a "whole and functioning body"(Livneh, 1982).

However, the area most investigated in this dimension is the perception held by nondisabled people that a disability is a form of punishment for personal or ancestral sins and transgressions, thereby associating responsibility with the disability (Livneh, 1982).

The affective-cognitive dimension is another area of attitude formation theory that has been heavily investigated. The affective domain is characterized as the emotional feelings of anxiety and guilt experienced by nondisabled persons when in the presence of persons with physical or mental disabilities. According to Livneh (1982), these emotional

reactions tend to be aversions to aesthetics at the sight of certain body deformities or observed odd behavior. Livneh (1982) goes on to state that "the source most frequently cited is the threat to one's intact body image when in the presence of a person with a disability" (pg. 39).

On the other hand, the cognitive aspects of this dimension include a disruption in social rules for interaction between nondisabled and disabled persons and typically present aspects of a fertile opportunity for all sorts of misconceptions, beliefs, and worries. Livneh (1982) states that the "unfamiliarity and disruption often leads to avoidance or withdrawal from the situation" (pg. 39).

While all six domains have significant influence in the development of attitudes toward the disabled, the four remaining dimensions of Livneh's (1982) model can be summarized as follows:

1. Consciousness-Unconsciousness: full awareness of attitudes; associating personal responsibility vs. childhood experiences; childrearing practices; threats to body image.

2. Past Experience-Present Situation: specific negative experience; social/moral belief vs. ambivalence triggered by conflicts of sympathy and aversion toward the disabled person.

3. Internally Originated-Externally Originated: demographic and personality attitude variables vs. prejudice-provoking behaviors by persons with disabilities.

4. Theoretical Sources-Empirical Sources: majority of determinants for negative attitudes vs. growing body of research evidence associating negative attitudes and situational/personal variables (pp. 38-45).

Other investigators (e.g., Yuker, 1988) believe that training is a key component in the strong association between negative professional attitudes and people with disabilities. Yuker reports that training that emphasizes the central role of the disability and the competence of the professional in contrast to the incompetence of the person with the disability tends to predispose one toward negative attitudes. (p. 195).

In summary, it appears that attitude formation among helping professionals can be associated with multiple sources and multiple dimensions. The possibility that helping professionals can develop group membership attitudes in addition to negative personal experiences might be the foundation for stigma, bias, and stereotyping toward persons with physical and mental disabilities.

2.5.3. Stigma

People with disabilities, as a minority group, are involved in the same struggles as other minority groups in terms of overcoming discrimination, prejudice, and the stigma associated with negative labels. Entering into and interacting with mainstream society has led many with disabilities to challenge the way others view disabilities as well as combat their own negative self-perception about their disability. For professional helpers, a

counselor's feelings and attitude toward their clients may either enhance or destroy the potential for establishing a therapeutic relationship. According to Marshall (1992), "Uniform positive attitudes are necessary to the development and the maintenance of a successful therapeutic relationship with the patient" (pg. 12).

The discussion on the concept of stigma can begin with the work of Erving Goffman (1963), which is considered to be classic in numerous studies. Stigma can be defined as a visible mark used to disgrace, shame, condemn, or ostracize. Goffman (1963) has defined stigma as an attribute that is deeply discrediting and as an undesired differentness. Goffman has identified six general dimensions of social stigmas relevant to people with disabilities:

a) Concealability – the extent to which a condition is hidden or apparent to others;

b) Disruptiveness - the degree of interference with social interactions and relationships;

c) Aesthetics - how others react to the condition with dislike or disgust;

d) Origin - the responsibility attributed for causing or maintaining the stigmatized condition;

e) course - the degree to which the condition is alterable or progressively degenerative; and f) peril - whether the condition will physically, socially, or morally contaminate others. Therefore, the concept of stigma includes both cognitive and behavioral components. People who are characterized by these dimensions are subject to the adverse effects of social stigmas and related prejudices. While these dimensions may be clear enough, Allison-Bolger (1999) says that the true meaning of a concept may only emerge through use and gives this example:

> "*The attitudes we normals have toward a person with a stigma. The key phrase here is,a person with a stigma. This implies stigma is something a person has, which is attached to, but somehow separate from, him or her*" (p. 627).

This example highlights the fact that stigma is considered both an attitude and an attribute.
Allison-Bolger further observed that regardless of the concept applied, stigma is separate from the individual.

2.2.4. Stereotype

According to Bogdan & Biklen (1993), Belief and assumptions about people with disabilities that promote the differential and unequal treatment practices are usually because of apparent or assumed physical, mental, or behavioral differences. (p. 69).
Two terms that point ultimately to discrimination are prejudice and stereotype.

The topic of prejudice has been highly researched, and the generally agreed-upon description is that of a negative bias or disliking of people because they belong to a particular group one dislikes.

The group is often an ethnic, racial, or other social category (Wasserman & Mahowald, 1998). Bogdan & Biklen (1993) define the term prejudice as any over generalized or oversimplified belief about the characteristics of a group or category of people. (p. 69).

Prejudiced assumptions directed toward the disabled include such statements as: they are incapable; they are naturally inferior and I thank God I'm not them; and they have more in common with each other than with nondisabled persons (Bogdan & Biklen, 1993).

These are the types of assumptions and beliefs that enable preconceptions and negative reactions toward people with disabilities.

Among professional helpers, some studies have already demonstrated that helping professionals have attitudes toward the disabled that are consistently lower than expected (Yuker, 1988). Wicas and Carluccio go further by stating: It would be erroneous to assume that an accumulation of credits in a counselor training program will alter deep-rooted attitudes, prejudices, and beliefs held by counselor trainees. (pg. 26).

As mentioned earlier, the subject of prejudice is a widely researched topic, and several theories have evolved from this research.

These theories include the ego-defense theory; scapegoating, or believing that people will blame frustration and setbacks on others (Forsyth, 1995); and cognitive theories suggesting that prejudice stems from the tendency of people to categorize others into groups, particularly groups of "us" and "them" (Myers, 1990).

Although most theorists will probably agree that no one theory can be accountable for the complex interaction of numerous factors, the cognitive theory will be discussed further.

According to Myers (1990), the cognitive theory for the causes of prejudicial attitudes builds on the categorization concepts mentioned earlier.

CHAPTER 3: METHODOLOGY

The purpose of this investigation was to determine whether there were differences between Doctors and Nurses' attitudes and supportive staff's attitudes toward the mentally ill and whether academic discipline, levels of training and experience, occupation, and background affect the attitudes of these professional groups. Three hypotheses, which are listed below, were formulated for this study

1. Doctors and nurses' attitudes toward the inclusion of persons with psychiatric disabilities will be more positive than supportive staff's attitudes.
2. Staff workers in professional positions will have a stronger belief in the need to include consumers in the decision-making process about their future than the paraprofessional workers.
3. Professional background variables (including academic discipline, levels of training and experience, and occupation) have an effect on MH and SA professionals' attitudes toward dually diagnosed clients.

This chapter, which is divided into five sections, will delineate the methodology used to conduct this study. Section one presents the research design used in this study. Section two presents the sample population along with the criteria for participation. Section three presents the instruments used in this study. Sections four and five present the data collection procedure and analysis.

3.1. Research design

The most common type of non experimental study is the survey research method, which was used in this study.
Survey research involves any measurement procedure that asks questions of respondents. Surveys pertain to almost any topic and can be divided into two broad categories: the questionnaire and the interview (Rea & Parker, 1997).
After receiving permission from the Director General of Ndera Neuropsychiatric hospital, the researcher administered a Likert-type rating scale instrument for the purpose of determining professional attitudes toward the mentally ill patients.

3.2. Participants

The participants for this study consisted of staff professionals employed at Ndera Neuropsychiatric hospital, a referral hospital in mental health located in a Kigali city.
A convenience sample consists of any participants who happen to be available at the time of data collection.
The criteria for participation in this study included:

1) Meeting all the guidelines for employment as a mental health care provider or supportive staff.
2) Accepting to participate in the research

Of the 103 mental health care professionals targeted for the study, 72 volunteered to participate in the study. All 72 survey forms were complete and were included in the data analysis. Of the 72 participants, 55 identified themselves as mental health direct care providers and 17 identified themselves as supportive professionals.

3.3. Instruments

3.3.1. Demographic questionnaire

This was developed by the researcher to collect demographic data

3.3.2. The Community Attitudes towards the Mentally Ill (CAMI) Scale

The Community Attitudes towards the Mentally Ill (CAMI) is a 40-item questionnaire developed by Taylor et al. (1979). Four separate scales designed to measure attitudes towards the mentally ill were created. These scales represent specific dimensions: authoritarianism, benevolence, social restrictiveness, and community mental health ideology.

Authoritarianism refers to a view of the mentally ill person as someone inferior who requires coercive handling. Social restrictiveness refers to the belief that the mentally ill patients are a threat to society and should be avoided. Benevolence corresponds to a paternalistic and sympathetic view of the mentally ill patient. Community mental health ideology concerns the acceptance of mental health services and mentally ill patients in the community.

Taylor and Dear (1981) selected these four dimensions from existing scales to create a scale which “discriminates between those who accept and those who reject the mentally ill in their community”.

Their questionnaire is in parts a modification of two other questionnaires: The Opinion about Mental Illness questionnaire (Cohen & Struening, 1962) and The Community Mental Health Ideology questionnaire (Baker & Schulberg, 1967)

Each dimension in the CAMI scale is measured by 10 statements of which an equal number are worded positively and negatively. A Likert-type scale measures attitudes on a scale of five points, from “strongly agree” (1) to “strongly disagree” (5).

Taylor et al. (1979) reported the alpha coefficient for each of the four scales from a data set of 1,090 subjects residing in Toronto (Canada), which varied from 0.68 to 0.88 (community mental health ideology, 0.88; social restrictiveness, 0.80; benevolence, 0.76;

authoritarianism, 0.68). They also reported data about external validity, using factor analysis. Their results showed a four-factor orthogonal solution, accounting for 42% of the variance. In addition, the authors reported a positive correlation between a priori scales and factor scales.

Many authors have used the CAMI scale (Dulac et al. 1988; Tefft et al. 1988; Mahatane & Johnston, 1989; Wahl & Lefkowits, 1989; Côté et al. 1992; 1993a, 1993b, 1993c; Brockington et al. 1993; Wolff et al. 1996a, 1996b).

Dulac et al. (1988), Tefft et al. (1988), Côté et al. (1992) and Brockington et al. (1993) worked with large data sets to measure the attitudes of English and Canadian populations towards the mentally ill using a modified and/or short version of the CAMI scale. Most of these authors modified the original version of the questionnaire.

Dulac et al. (1988) conducted a survey about attitudes towards the mentally ill in Montreal (Canada) using a short, 24-item version of the CAMI on a sample of 571 subjects. They found a five-factor orthogonal solution accounting for 47% of the cumulative variance. This analysis partly confirms the results of Taylor et al. (1979).

Tefft et al. (1988) used a shorter, 21-item, version of the CAMI on a sample of 548 subjects from Winnipeg (Canada). They administered this version and other questionnaires about perception about the mentally ill. Their 21-item version contained only those items that loaded at 0.50 or higher on a single factor in the Taylor and Dear (1981) analysis. Their data indicated an alpha coefficient range from 0.55 to 0.75 for the four scales. Factor analysis confirmed the four dimensions of Taylor and Dear (1981) about attitudes towards the mentally ill: the four factors accounted for 52% of the variance. One limitation of this study is the fact that the subjects' responses were simply "agree" or "disagree"; which reduced the variance.

Recently Brockington et al. (1993) used a modified version of the CAMI scale (31 items) to measure attitudes about mental illness of around 2,000 subjects from two areas in England (Malvern and Bromsgrove). The factor analysis revealed three dimensions (authoritarianism, benevolence, and fear of the mentally ill), partly confirming the findings of Taylor and Dear (1981).

Côté et al. (1993a) used the CAMI scale (see also Côté et al. 1992, 1993b) to measure attitudes towards the mentally ill of professionals working in a large number of psychiatric institutions. These authors worked with a version of the CAMI scale that was composed of ten items with a Likert-type scale of six points. The alpha coefficient was very high at 0.91.

In general, their results indicated that psychiatrists and social workers had less negative attitudes towards the mentally ill than did the doctors and auxiliary nurses.

3.4. Variables

Two set of data were collected

3.4.1. Dependent variables

Community Attitudes towards the Mentally Ill (CAMI) is a 40-item questionnaire developed by Taylor et al. (1979). The four factors derived from their analysis are:

Authoritarianism

Social Restrictiveness

Benevolence

Community Mental Health Ideology

3.4.2. Independent variables

Gender

Age

Academic Discipline:

Training and Experience:

Occupation

3.5. Data collection procedures

After receiving permission, the questionnaire was distributed to the staff members who satisfied the criteria and were available at the time of the research.

Every staff member was met personally and was given his/her questionnaire to ensure that he/she responded to it.

The respondents were asked to indicate the extent to which they agreed or disagreed with the statements in the CAMI Scale on a five-point scale, ranging from 1=strongly agree to 5= strongly disagree.

3.6. Data analysis

A total of 72 respondents participated in the study. After the data were collected, they were entered into SPSS 16.0 for Windows. When all data had been entered and cleaned, the hard copy of the data was destroyed.

Descriptive statistics were computed first to ensure that all of the data were entered properly and to check for missing data. Descriptive statistics were also explored initially to observe the patterns in the data as well as examine the normality of the dependent variables.

Also, descriptive analysis was performed on the last demographic question regarding different views on the decision-making.

Multiple analyses were conducted to determine the relationships between the independent variables, demographics, and the CAMI scale.

Bivariate analyses were performed initially to examine the predictive ability of each demographic variable in relation to each of the dependent variables.

These bivariate analyses also provided justification for the use of multivariate analysis of covariance which controls for the influence of covariates on the dependent variables.

Thus, if the covariates did not indicate any predictive ability on the dependent measures, it would have been more appropriate to conduct a multivariate analysis of variance.

Multivariate analysis of variance (MANOVA) was utilized to determine if a difference exists between groups of the independent variables on a linear combination of the dependent variables.

MANCOVA also controlled for the demographic covariates which may affect the dependent variables.

CHAPTER 4: RESULTS

The main purpose of this study was to determine whether there are differences in attitudes between directly involved and supportive professionals toward the mentally ill clients received in the Ndera Neuropsychiatric hospital.

The secondary purpose was to determine whether higher levels of education and/or more experience in the field would have an impact on the professional's attitudes towards mental illness.

A total of 72 questionnaires were collected. Participants varied in age from 22 to 62 (Mean=33.60, SD= 8.122) and were predominantly self-identified as males (N=37, or 51%) and single (N=36, or 50%). The highest level of education achieved was primarily a master's degree (N=4) but the majority had a high school level (N= 25, or 35%). The majority of our respondents were in the category of the directly involved professionals (N=55, or 76%). According to their occupation, the majority of our respondents were nurses (N=36, or 50%). For more demographic information, see Figure 1 and Table 1.

Figure 1: Percentage of the respondents according to their occupation

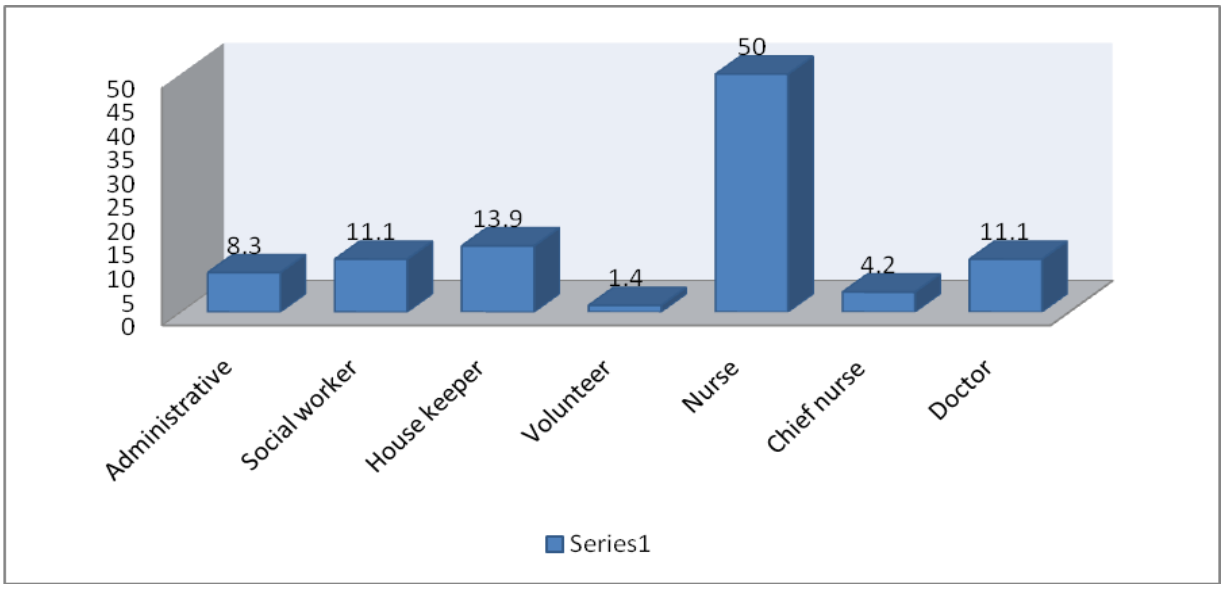

Table 1: Selected Demographics for the participants

Variable		Frequency	Percent
Gender	Male	37	51
	Female	35	49
	Total	**72**	**100**
Family Status	Single	36	50
	Married	34	47
	Divorced	1	1
	Widower	1	1
	Total	**72**	**100**
Education	Elementary school	8	11
	High school	25	35
	Special training/Some college	18	25
	Bachelor's degree	15	21
	Master's degree	4	6
	Unclassified	2	3
	Total	**72**	**100**
Background	Former consumer	8	11
	Relative of a consumer	14	19
	Friend of a consumer	18	25
	N/A	32	44
	Total	**72**	**100**
Role	Directly involved Professionals	55	76
	Supporting professionals	17	24
	Total	**72**	**100**

4.1. Attitudes towards the mentally ill patient

As indicated in tables 2, 3, 4, and 5; the majority agreed with the positive attitudes and disagreed with the negative ones.

Regarding the attitudes of the Authoritarianism subscale of the CAMI scale, the majority of the respondents agreed with the positive attitudes.

55 respondents or 76% of our respondents agreed that more tax money should be spent on the care and treatment of mentally ill patients.

71 or 98% of the respondents agreed that the best therapy for many mental patients is to be part of the normal community.

When it comes to the negative attitudes, within this subscale, the majority of our respondents disagreed with them. 41 or 57% of the respondents don't think that locating mental health facilities in a residential area downgrades the neighborhood.

However, 37 or 51% of the respondents think that as soon as a person shows signs of mental disturbances, he should be hospitalized.

This may be due to the fact that mental health services in the community are not organized well enough; there is only one psychiatric nurse who is based at the district hospital level and this one is unable to provide care to all mental health service seekers in the district.

The mean score for all the items is 3.98. All details can be seen on the table 2 and 3.

Table 2: percentage of the respondents agreeing or disagreeing with authoritarian attitudes

N0	Variable	Strongly agree	Agree	No Opinion	Disagree	Strongly disagree
1	As soon as a person shows signs of mental disturbance, he should be hospitalized.	18(25%)	19(26%)	4(6%)	23(32%)	8(11%)
2	More tax money should be spent on the care and treatment of the mentally ill.	36(50%)	19(26%)	4(6%)	11(15%)	2(3%)
3	The mentally ill should not be isolated from the rest of the community	52(72%)	15(21%)	2(3%)	2(3%)	1(1%)
4	The best therapy for many mental patients is to be part of a normal community	57(79%)	14(19%)	0(0%)	1(1%)	0(0%)
5	Mental illness is an illness like any other	44(61%	21(10%)	0(0%)	7(10%)	0(0%)
6	The mentally ill are a burden on society	39(54%)	18(25%)	1(1%)	10(14%)	4(6%)
7	The mentally ill are far less of a danger than most people suppose	21(29%)	31(43%)	7(10)	11(15%)	2(3%)
8	Locating mental health facilities in a residential area downgrades the neighborhood.	12(17%)	9(13%)	10(14%)	21(29%)	20(28%)
9	There is something about the mentally ill that makes it easy to tell them from normal people	14(19%)	37(51%)	13(18%)	5(7%)	3(4%)
10	The mentally ill have for too long been the subject of ridicule	38(53%)	22(31%)	6(8%)	5(7%)	1(1%)

Table 3: Mean scores for authoritarian attitudes

		N	Mean	Std. Deviation	Std. Error
As soon as a person shows signs of mental disturbance, he should be hospitalized.	Directly Involved staff	55	2.84	1.46	0.20
	Supporting staff	17	2.59	1.28	0.31
	Total	72	2.78	1.42	0.17
More tax money should be spent on the care and treatment of the mentally ill.	Directly Involved staff	55	3.65	1.34	0.18
	Supporting staff	17	4.76	0.75	0.18
	Total	72	3.92	1.31	0.15
The mentally ill should not be isolated from the rest of the community	Directly Involved staff	55	4.55	0.86	0.12
	Supporting staff	17	4.76	0.56	0.14
	Total	72	4.60	0.80	0.09
The best therapy for many mental patients is to be part of a normal community	Directly Involved staff	55	4.69	0.57	0.08
	Supporting staff	17	5.00	0.00	0.00
	Total	72	4.76	0.52	0.06
Mental illness is an illness like any other	Directly Involved staff	55	4.44	0.90	0.12
	Supporting staff	17	4.35	1.00	0.24
	Total	72	4.42	0.92	0.11
The mentally ill are a burden on society	Directly Involved staff	55	3.96	1.33	0.18
	Supporting staff	17	4.47	1.01	0.24
	Total	72	4.08	1.28	0.15
The mentally ill are far less of a danger than most people suppose	Directly Involved staff	55	3.85	1.15	0.15
	Supporting staff	17	3.65	1.00	0.24
	Total	72	3.81	1.11	0.13
Locating mental health facilities in a residential area downgrades the neighborhood.	Directly Involved staff	55	3.38	1.47	0.20
	Supporting staff	17	3.41	1.37	0.33
	Total	72	3.39	1.44	0.17
There is something about the mentally ill that makes it easy to tell them from normal people	Directly Involved staff	55	3.78	0.96	0.13
	Supporting staff	17	3.65	1.11	0.27
	Total	72	3.75	0.99	0.12
The mentally ill have for too long been the subject of ridicule	Directly Involved staff	55	4.20	1.01	0.14
	Supporting staff	17	4.47	0.87	0.21
	Total	72	4.26	0.98	0.12

One-way ANOVA tests were performed to detect differences between levels of the category on each of the statements in the authoritarianism subscale.

There are significant statistical differences between the 2 groups in some statements of the subgroup.

Our respondents showed differences on the item N0 2: More tax money should be spent on the care and treatment of the mentally ill (F= 10.62,p= 0.00).

They also showed differences on the statement that the best therapy for many mental patients is to be part of a normal community (F=4.89.p=0.03).

Our respondents do not show any difference on the other items of the authoritarianism subscale.

Details are shown in table 4.

Table 4: One-way ANOVA for authoritarianism statements

		Sum of Squares	df	Mean Square	F	Sig.
As soon as a person shows signs of mental disturbance, he should be hospitalized.	Between Groups	0.80	1	0.80	0.40	0.53
	Within Groups	141.64	70	2.02		
	Total	142.44	71			
More tax money should be spent on the care and treatment of the mentally ill.	Between Groups	16.00	1	16.00	10.62	0.00
	Within Groups	105.50	70	1.51		
	Total	121.50	71			
The mentally ill should not be isolated from the rest of the community	Between Groups	0.62	1	0.62	0.98	0.33
	Within Groups	44.70	70	0.64		
	Total	45.32	71			
The best therapy for many mental patients is to be part of a normal community	Between Groups	1.24	1	1.24	4.89	0.03
	Within Groups	17.75	70	0.25		
	Total	18.99	71			
Mental illness is an illness like any other	Between Groups	0.09	1	0.09	0.11	0.75
	Within Groups	59.41	70	0.85		
	Total	59.50	71			
The mentally ill are a burden on society	Between Groups	3.34	1	3.34	2.08	0.15
	Within Groups	112.16	70	1.60		
	Total	115.50	71			
The mentally ill are far less of a danger than most people suppose	Between Groups	0.56	1	0.56	0.45	0.50
	Within Groups	86.72	70	1.24		
	Total	87.28	71			
Locating mental health facilities in a residential area downgrades the neighborhood.	Between Groups	0.01	1	0.01	0.01	0.94
	Within Groups	147.10	70	2.10		
	Total	147.11	71			
There is something about the mentally ill that makes it easy to tell them from normal people	Between Groups	0.24	1	0.24	0.24	0.63
	Within Groups	69.26	70	0.99		
	Total	69.50	71			
The mentally ill have for too long been the subject of ridicule	Between Groups	0.95	1	0.95	0.99	0.32
	Within Groups	67.04	70	0.96		
	Total	67.99	71			

Regarding the social restrictiveness attitudes, the majority of our respondents agreed with the positive attitudes and disagreed with the negative ones.

48 or 67% of them disagreed with the statement that a woman would be foolish to marry a man who suffered from mental illness, even though he seems fully recovered.

57 or 79% of the respondents disagreed with the statement that increased spending on mental health services is a waste of tax dollars.

The opinions of our respondents about the positive attitudes in this subscale are that they agree to all of them.

61 or 85% think that mental health services should be provided through community-based facilities while 64 or 92% think that no-one has the right to exclude the mentally ill from their neighborhood.

The mean score is 3.75 for all the items in this social restrictiveness subscale.

See table 5 and 6 for the details.

Table 5: Percentage of the respondents agreeing or disagreeing with social restrictiveness attitudes

N0	Variable	Strongly agree	Agree	No Opinion	Disagree	Strongly disagree
11	A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered	8(11%)	5(7%)	11(15%)	21(29%)	27(38%)
12	As far as possible mental health services should be provided through community based facilities	40(56%)	21(29%)	2(3%)	7(10%)	2(3%)
13	Less emphasis should be placed on protecting the public from the mentally ill	7(10%)	28(39%)	5(7%)	20(2%)	12(17%)
14	Increased spending on mental health services is a waste of tax dollars	6(8%)	2(3%)	7(10)	19(26%)	38(53%)
15	No-one has the right to exclude the mentally ill from their neighborhood	48(67%)	16(25%)	3(4%)	2(3%)	1(1%)
16	Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great	15(21%)	28(39%)	4(6%)	19(26%)	6(8%)
17	Mental patients need the same kind of control and discipline as a young child	21(29%)	17(24%)	3(4%)	26(36%)	5(7%)
18	We need to adopt a far more tolerant attitude toward the mentally ill in our society	43(60%)	25(35%)	2(3%)	1(1%)	1(1%)
19	I would not want to live next door to someone who has been mentally ill	7(10%)	5(7%)	9(13%)	30(42%)	21(29%)
20	Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community	35(49%)	28(39%)	7(10%)	1(1%)	1(1%)

Table 6: Mean scores for social restrictiveness attitudes

		N	Mean	Std. Deviation	Std. Error
A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered	Directly Involved staff	55	3.80	1.32	0.18
	Supporting staff	17	3.59	1.37	0.33
	Total	72	3.75	1.33	0.16
As far as possible mental health services should be provided through community based facilities	Directly Involved staff	55	4.31	0.92	0.12
	Supporting staff	17	4.06	1.52	0.37
	Total	72	4.25	1.08	0.13
Less emphasis should be placed on protecting the public from the mentally ill	Directly Involved staff	55	2.85	1.35	0.18
	Supporting staff	17	3.35	1.17	0.28
	Total	72	2.97	1.32	0.16
Increased spending on mental health services is a waste of tax dollars	Directly Involved staff	55	4.36	0.93	0.13
	Supporting staff	17	3.35	1.69	0.41
	Total	72	4.13	1.22	0.14
No-one has the right to exclude the mentally ill from their neighborhood	Directly Involved staff	55	4.40	0.89	0.12
	Supporting staff	17	4.94	0.24	0.06
	Total	72	4.53	0.82	0.10
Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great	Directly Involved staff	55	2.84	1.29	0.17
	Supporting staff	17	1.94	1.14	0.28
	Total	72	2.63	1.30	0.15
Mental patients need the same kind of control and discipline as a young child	Directly Involved staff	55	3.04	1.32	0.18
	Supporting staff	17	1.53	1.01	0.24
	Total	72	2.68	1.40	0.17
We need to adopt a far more tolerant attitude toward the mentally ill in our society	Directly Involved staff	55	4.47	0.66	0.09
	Supporting staff	17	4.59	1.00	0.24
	Total	72	4.50	0.75	0.09
I would not want to live next door to someone who has been mentally ill	Directly Involved staff	55	4.02	1.10	0.15
	Supporting staff	17	2.82	1.24	0.30
	Total	72	3.74	1.23	0.15
Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community	Directly Involved staff	55	4.25	0.75	0.10
	Supporting staff	17	4.53	1.01	0.24
	Total	72	4.32	0.82	0.10

One-way ANOVA tests were performed to observe differences between levels of the category on each of the statements in the social restrictiveness subscale.

There are significant statistical differences between the 2 groups on some statements of the subgroup.

Our respondents showed differences in the item stating that increased spending money on mental health services is a waste of tax dollars($F= 10.03$, $p= 0.00$).

They also showed differences on the statement that "No-one has the right to exclude the mentally ill from their neighborhood" ($F=6.03$. $p=0.02$) as well as on the statement that "Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great" ($F= 6.59$, $p=0.01$).

Our respondents show differences on the statement that "Mental patients need the same kind of control and discipline as a young child" ($F=18.74$, $p=0.00$).

Finally, they show differences on the statement that "I would not want to live next door to someone who has been mentally ill" ($F=14.50$, $p=0.00$).

Our respondents do not show any difference on the other items of the social restrictiveness subscale.

Details are shown in table 7.

Table 7: One - way ANOVA for social restrictiveness statements of attitudes

		Sum of Squares	df	Mean Square	F	Sig.
A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered	Between Groups	0.58	1	0.58	0.33	0.57
	Within Groups	124.92	70	1.78		
	Total	125.50	71			
As far as possible mental health services should be provided through community based facilities	Between Groups	0.81	1	0.81	0.69	0.41
	Within Groups	82.69	70	1.18		
	Total	83.50	71			
Less emphasis should be placed on protecting the public from the mentally ill	Between Groups	3.23	1	3.23	1.87	0.18
	Within Groups	120.72	70	1.72		
	Total	123.94	71			
Increased spending on mental health services is a waste of tax dollars	Between Groups	13.27	1	13.27	10.03	0.00
	Within Groups	92.61	70	1.32		
	Total	105.88	71			
No-one has the right to exclude the mentally ill from their neighborhood	Between Groups	3.80	1	3.80	6.03	0.02
	Within Groups	44.14	70	0.63		
	Total	47.94	71			
Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great	Between Groups	10.41	1	10.41	6.59	0.01
	Within Groups	110.47	70	1.58		
	Total	120.88	71			
Mental patients need the same kind of control and discipline as a young child	Between Groups	29.49	1	29.49	18.74	0.00
	Within Groups	110.16	70	1.57		
	Total	139.65	71			
We need to adopt a far more tolerant attitude toward the mentally ill in our society	Between Groups	0.17	1	0.17	0.30	0.58
	Within Groups	39.83	70	0.57		
	Total	40.00	71			
I would not want to live next door to someone who has been mentally ill	Between Groups	18.53	1	18.53	14.50	0.00
	Within Groups	89.45	70	1.28		
	Total	107.99	71			
Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community	Between Groups	0.98	1	0.98	1.47	0.23
	Within Groups	46.67	70	0.67		
	Total	47.65	71			

Regarding the benevolence attitudes from the CAMI scale, the majority of our respondents agreed to the positive attitudes.

As an example, 70 or 97% agreed to the fact that mentally ill patients should be encouraged to assume the responsibilities of normal life and 50 or 79% think that locating mental health services in residential neighborhoods does not endanger local residents.

Our respondents disagreed with the negative statements of this subscale.

60 or 94 % disagreed with the statement that the best way to handle the mentally ill is to keep them behind locked doors, and 56 or 78% disagreed with the statement that anyone with a history of mental problems should be excluded from taking public office.

When one analyses the table on the mean scores for this subscale, the result is that our respondents have higher scores and this means their attitudes are in favor of mentally ill patients. The mean score is 3.88.

Details are shown in the table 8 and 9.

Table 8: Percentage of the respondents agreeing or disagreeing benevolence attitudes

N0	Variable	Strongly agree	Agree	No Opinion	Disagree	Strongly disagree
21	The mentally ill should not be treated as outcasts of society	37(51%)	13(18%)	4(6%)	12(17%)	6(8%)
22	There are sufficient existing services for the mentally ill	3(4%)	2(3%)	7(10%)	38(53%)	22(31%)
23	Mental patients should be encouraged to assume the responsibilities of normal life	56(78%)	14(19%)	1(1%)	1(1%)	0(0%)
24	Local residents have good reason to resist the location of mental health services in their neighborhood	3(4%)	15(21%)	9(13%)	28(39%)	17(24%)
25	The best way to handle the mentally ill is to keep them behind locked doors	4(6%)	1(1%)	7(10%)	22(31%)	38(53%)
26	Our mental hospitals seem more like prisons than places where the mentally ill can be cared for	3(4%)	5(7%)	7(10%)	26(36%)	31(43%)
27	Anyone with a history of mental problems should be excluded from taking public office	5(7%)	7(10%)	4(6%)	23(32%)	33(46%)
28	Locating mental health services in residential neighborhoods' does not endanger local residents	31(43%)	19(26%)	8(11%)	9(13%)	5(7%)
29	Mental hospitals are an out-dated means of treating the mentally ill	8(11%)	14(19%)	9(13%)	25(35%)	16(22%)
30	The mentally ill don't deserve our sympathy	6(8%)	9(13%)	5(7%)	22(31%)	30(42%)

Table 9: Mean score for benevolence attitudes

		N	Mean	Std. Deviation	Std. Error
The mentally ill should not be treated as outcasts of society	Directly Involved staff	55	3.85	1.35	0.18
	Supporting staff	17	3.94	1.64	0.40
	Total	72	3.88	1.41	0.17
There are sufficient existing services for the mentally ill	Directly Involved staff	55	4.02	0.89	0.12
	Supporting staff	17	4.06	1.14	0.28
	Total	72	4.03	0.95	0.11
Mental patients should be encouraged to assume the responsibilities of normal life	Directly Involved staff	55	4.69	0.57	0.08
	Supporting staff	17	4.88	0.49	0.12
	Total	72	4.74	0.56	0.07
Local residents have good reason to resist the location of mental health services in their neighborhood	Directly Involved staff	55	3.71	1.17	0.16
	Supporting staff	17	3.12	1.17	0.28
	Total	72	3.57	1.18	0.14
The best way to handle the mentally ill is to keep them behind locked doors	Directly Involved staff	55	4.51	0.66	0.09
	Supporting staff	17	3.35	1.58	0.38
	Total	72	4.24	1.07	0.13
Our mental hospitals seem more like prisons than places where the mentally ill can be cared for	Directly Involved staff	55	4.13	1.07	0.14
	Supporting staff	17	3.88	1.17	0.28
	Total	72	4.07	1.09	0.13
Anyone with a history of mental problems should be excluded from taking public office	Directly Involved staff	55	4.16	1.05	0.14
	Supporting staff	17	3.47	1.66	0.40
	Total	72	4.00	1.24	0.15
Locating mental health services in residential neighborhoods' does not endanger local residents	Directly Involved staff	55	3.91	1.27	0.17
	Supporting staff	17	3.71	1.40	0.34
	Total	72	3.86	1.29	0.15
Mental hospitals are an out-dated means of treating the mentally ill	Directly Involved staff	55	2.75	1.31	0.18
	Supporting staff	17	2.24	1.35	0.33
	Total	72	2.63	1.33	0.16
The mentally ill don't deserve our sympathy	Directly Involved staff	55	3.67	1.41	0.19
	Supporting staff	17	4.41	0.71	0.17
	Total	72	3.85	1.32	0.16

One-way ANOVA tests were performed to detect differences between levels of the category on each of the statements in the benevolence subscale.

There are significant statistical differences between the 2 groups in some statements of the subgroup.

Our respondents showed differences on the item stating that “The best way to handle the mentally ill is to keep them behind locked doors” ($F= 19.10$, $p= 0.00$).

They also showed differences on the statement that “Anyone with a history of mental problems should be excluded from taking public office” ($F=4.21$,$p =0.04$) as well as on the statement that “The mentally ill don’t deserve our sympathy” ($F= 4.27$. $p=0.04$).

Our respondents do not show any difference on the other items of the benevolence subscale.

Details are shown in table 10.

Table 10: One-way ANOVA for the benevolence statements of attitudes

		Sum of Squares	df	Mean Square	F	Sig.
The mentally ill should not be treated as outcasts of society	Between Groups	0.10	1	0.10	0.05	0.83
	Within Groups	141.78	70	2.03		
	Total	141.88	71			
There are sufficient existing services for the mentally ill	Between Groups	0.02	1	0.02	0.02	0.88
	Within Groups	63.92	70	0.91		
	Total	63.94	71			
Mental patients should be encouraged to assume the responsibilities of normal life	Between Groups	0.48	1	0.48	1.55	0.22
	Within Groups	21.51	70	0.31		
	Total	21.99	71			
Local residents have good reason to resist the location of mental health services in their neighborhood	Between Groups	4.54	1	4.54	3.34	0.07
	Within Groups	95.11	70	1.36		
	Total	99.65	71			
The best way to handle the mentally ill is to keep them behind locked doors	Between Groups	17.36	1	17.36	19.10	0.00
	Within Groups	63.63	70	0.91		
	Total	80.99	71			
Our mental hospitals seem more like prisons than places where the mentally ill can be cared for	Between Groups	0.78	1	0.78	0.65	0.42
	Within Groups	83.87	70	1.20		
	Total	84.65	71			
Anyone with a history of mental problems should be excluded from taking public office	Between Groups	6.24	1	6.24	4.21	0.04
	Within Groups	103.76	70	1.48		
	Total	110.00	71			
Locating mental health services in residential neighborhoods' does not endanger local residents	Between Groups	0.54	1	0.54	0.32	0.57
	Within Groups	118.07	70	1.69		
	Total	118.61	71			
Mental hospitals are an out-dated means of treating the mentally ill	Between Groups	3.38	1	3.38	1.95	0.17
	Within Groups	121.50	70	1.74		
	Total	124.88	71			
The mentally ill don't deserve our sympathy	Between Groups	7.09	1	7.09	4.27	0.04
	Within Groups	116.23	70	1.66		
	Total	123.32	71			

The last category of the questions asked of our participants was the attitudes that are related to the community mental health ideology.

As it has been shown with the above statements, the majority agreed with the positive attitudes and disagreed with the negative ones.

60 or 83 % agreed with the statements that the mentally ill should not be denied their individual rights and 69 or 96% agreed that we have a responsibility to provide the best possible care for the mentally ill.

In addition, 60 or 84% disagreed that the mentally ill should not be given any responsibility. The mean score is 3.87.

Details are shown in table 11.

Table 11: Percentage of the respondents agreeing or disagreeing community mental health ideology attitudes

N0	Variable	Strongly agree	Agree	No Opinion	Disagree	Strongly disagree
31	The mentally ill should not be denied their individual rights	44(61%)	16(22%)	1(1%)	8(11%)	3(4%)
32	Mental health facilities should be kept out of residential neighborhoods	10(14%)	11(15%)	4(6%)	30(42%)	17(24%)
33	One of the main causes of mental illness is a lack of self-discipline and will power	2(3%)	11(15%)	9(13%)	30(42%)	20(28%)
34	We have a responsibility to provide the best possible care for the mentally ill	53(74%)	16(22%)	0(0%)	1(1%)	2(3%)
35	The mentally ill should not be given any responsibility	5(7%)	3(4%)	4(6%)	33(46%)	27(38%)
36	Residents have nothing to fear from people coming into their neighborhood to obtain mental health services.	35(49%)	25(36%)	3(4%)	5(7%)	3(4%)
37	Virtually anyone can become mentally ill	40(56%)	23(32%)	5(7%)	2(3%)	2(3%)
38	It is best to avoid anyone who has mental problems.	10(14%)	7(10%)	4(6%)	26(36%)	25(35%)
39	Most women who were once patients in a mental hospital can be trusted as baby sitters.	15(21%)	20(28%)	6(8%)	19(26%)	12(17%)
40	It is frightening to think of people with mental problems living in residential neighborhoods’	6(8%)	17(24%)	10(14%)	30(42%)	9(13%)

Table 12: Mean scores for community mental health ideology attitudes

		N	Mean	Std. Deviation	Std. Error
The mentally ill should not be denied their individual rights	Directly Involved staff	55	4.16	1.18	0.16
	Supporting staff	17	4.65	1.00	0.24
	Total	72	4.28	1.15	0.14
Mental health facilities should be kept out of residential neighborhoods	Directly Involved staff	55	3.89	1.10	0.15
	Supporting staff	17	2.06	1.25	0.30
	Total	72	3.46	1.37	0.16
One of the main causes of mental illness is a lack of self-discipline and will power	Directly Involved staff	55	3.62	1.08	0.15
	Supporting staff	17	4.24	1.09	0.26
	Total	72	3.76	1.11	0.13
We have a responsibility to provide the best possible care for the mentally ill	Directly Involved staff	55	4.62	0.76	0.10
	Supporting staff	17	4.65	1.00	0.24
	Total	72	4.63	0.81	0.10
The mentally ill should not be given any responsibility	Directly Involved staff	55	4.09	0.99	0.13
	Supporting staff	17	3.82	1.47	0.36
	Total	72	4.03	1.11	0.13
Residents have nothing to fear from people coming into their neighborhood to obtain mental health services.	Directly Involved staff	55	4.16	1.01	0.14
	Supporting staff	17	4.24	1.30	0.32
	Total	72	4.18	1.08	0.13
Virtually anyone can become mentally ill	Directly Involved staff	55	4.29	0.90	0.12
	Supporting staff	17	4.53	1.07	0.26
	Total	72	4.35	0.94	0.11
It is best to avoid anyone who has mental problems.	Directly Involved staff	55	3.87	1.33	0.18
	Supporting staff	17	3.06	1.48	0.36
	Total	72	3.68	1.40	0.17
Most women who were once patients in a mental hospital can be trusted as baby sitters.	Directly Involved staff	55	2.91	1.40	0.19
	Supporting staff	17	3.71	1.40	0.34
	Total	72	3.10	1.44	0.17
It is frightening to think of people with mental problems living in residential neighborhoods'	Directly Involved staff	55	3.47	1.05	0.14
	Supporting staff	17	2.59	1.42	0.34
	Total	72	3.26	1.20	0.14

One-way ANOVA tests were performed to observe differences between levels of the category on each of the statements in the community mental health ideology subscale.

There are significant statistical differences between the 2 groups in some statements of the subgroup. Our respondents showed differences on the item stating that “Mental health facilities should be kept out of residential neighborhoods” ($F= 33.79$, $p= 0.00$).

They also showed differences on the statement that “One of the main causes of mental illness is a lack of self-discipline and will power” ($F=4.22$, $p=0.04$) as well as on the statement that “It is best to avoid anyone who has mental problems” ($F= 4.59$, $p=0.04$).

There are significant differences on the statement that “Most women who were once patients in a mental hospital can be trusted as baby sitters.” ($F= 4.18$, $p=0.04$) as well as the statement that “It is frightening to think of people with mental problems living in residential neighborhoods’” ($F= 7.74$, $p=0.01$).

Our respondents do not show any difference on the other items of the community mental health ideology subscale.

Details are shown in table 13.

Table 13:One-way ANOVA for communtiy mental health ideology statements of attitudes

		Sum of Squares	df	Mean Square	F	Sig.
The mentally ill should not be denied their individual rights	Between Groups	3.03	1	3.03	2.32	0.13
	Within Groups	91.41	70	1.31		
	Total	94.44	71			
Mental health facilities should be kept out of residential neighborhoods	Between Groups	43.59	1	43.59	33.79	0.00
	Within Groups	90.29	70	1.29		
	Total	133.88	71			
One of the main causes of mental illness is a lack of self-discipline and will power	Between Groups	4.95	1	4.95	4.22	0.04
	Within Groups	82.04	70	1.17		
	Total	86.99	71			
We have a responsibility to provide the best possible care for the mentally ill	Between Groups	0.01	1	0.01	0.02	0.90
	Within Groups	46.86	70	0.67		
	Total	46.88	71			
The mentally ill should not be given any responsibility	Between Groups	0.93	1	0.93	0.75	0.39
	Within Groups	87.02	70	1.24		
	Total	87.94	71			
Residents have nothing to fear from people coming into their neighborhood to obtain mental health services.	Between Groups	0.07	1	0.07	0.06	0.81
	Within Groups	82.59	70	1.18		
	Total	82.65	71			
Virtually anyone can become mentally ill	Between Groups	0.74	1	0.74	0.84	0.36
	Within Groups	61.58	70	0.88		
	Total	62.32	71			
It is best to avoid anyone who has mental problems.	Between Groups	8.60	1	8.60	4.59	0.04
	Within Groups	131.05	70	1.87		
	Total	139.65	71			
Most women who were once patients in a mental hospital can be trusted as baby sitters.	Between Groups	8.24	1	8.24	4.18	0.04
	Within Groups	138.07	70	1.97		
	Total	146.32	71			
It is frightening to think of people with mental problems living in residential neighborhoods’	Between Groups	10.16	1	10.16	7.74	0.01
	Within Groups	91.83	70	1.31		
	Total	101.99	71			

Independent T-tests were also conducted on each of the five factor variables to determine if the scores in one condition do not vary significantly more than the scores in the second condition. The aim was to see whether the variability in the two conditions is or not significantly different.

As illustrated in Table 15, results from the Levene's Test for Equality of Variances indicate that, for the majority of the items in the authoritarianism subscale, the variability in our 2 groups is about the same. This means that the scores in the group of directly involved staff do not vary much more than the scores in the supporting staff ($p>0.05$).

T-test for Equality of Means showed no statistically significant difference between our 2 groups in many of the items of the authoritarianism subscale.

However, there is a significant difference of means on the item no. 2. “More tax money should be spent on the care and treatment of the mentally ill”.

The scores ($T= -3.26$, $p= 0.00$) show that the mean score for the directly involved is greater than the score of the supportive staff for this item.

The directly involved staff also have a higher mean score on the item “The best therapy for many mental patients is to be part of a normal community” ($T= -1.67$, $p= 0.00$).

Details are shown in table 14.

Table 14: Independent sample T test for authoritarianism

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ASSOON	Equal variances assumed	3.33	0.07	0.63	70	0.53	0.25	0.4	-0.54	1.04
	Equal variances not assumed			0.68	30.12	0.5	0.25	0.37	-0.5	1
TAX	Equal variances assumed	15.69	0.00	-3.26	70	0.00	-1.11	0.34	-1.79	-0.43
	Equal variances not assumed			-4.33	48.69	0.00	-1.11	0.26	-1.63	-0.6
ISOLATED	Equal variances assumed	2.57	0.11	-0.99	70	0.33	-0.22	0.22	-0.66	0.22
	Equal variances not assumed			-1.23	40.95	0.23	-0.22	0.18	-0.58	0.14
BEST	Equal variances assumed	27.72	0.00	-2.21	70	0.03	-0.31	0.14	-0.59	-0.03
	Equal variances not assumed			-4	54	0.00	-0.31	0.08	-0.46	-0.15
MENTAL	Equal variances assumed	0.17	0.69	0.33	70	0.74	0.08	0.26	-0.43	0.59
	Equal variances not assumed			0.31	24.58	0.76	0.08	0.27	-0.47	0.64
BURDEN	Equal variances assumed	1.76	0.19	-1.44	70	0.15	-0.51	0.35	-1.21	0.19
	Equal variances not assumed			-1.67	34.97	0.1	-0.51	0.3	-1.12	0.11
DANGER	Equal variances assumed	0.1	0.75	0.67	70	0.5	0.21	0.31	-0.41	0.82
	Equal variances not assumed			0.72	30.245	0.48	0.21	0.29	-0.38	0.79
DOWNGRAD	Equal variances assumed	1.15	0.28	-0.07	70	0.94	-0.03	0.4	-0.83	0.77
	Equal variances not assumed			-0.08	28.34	0.94	-0.03	0.39	-0.82	0.76
EASYTOTE	Equal variances assumed	0.624	0.43	0.49	70	0.63	0.14	0.28	-0.41	0.69
	Equal variances not assumed			0.45	23.74	0.66	0.14	0.3	-0.48	0.75
RIDICULE	Equal variances assumed	0.36	0.55	-1	70	0.32	-0.27	0.27	-0.81	0.27
	Equal variances not assumed			-1.07	30.31	0.29	-0.27	0.25	-0.79	0.24

The results from the 2 groups regarding the social restrictiveness statements of attitudes have also been compared, using the T-test .

As illustrated in Table 16, results from the Levene's Test for Equality of Variances indicate that, for the majority of the items in the social restrictiveness subscale, the variability in our 2 groups is about the same.

The two groups have equal mean scores for the following items: "A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered" (T= 0.57, p= 0.57), "As far as possible mental health services should be provided through community based facilities" (t=0.64, p= 0.53), "Less emphasis should be placed on protecting the public from the mentally ill" (t= -1.37, p=0.18), "Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community (t= -1.04, p=0.31) and "We need to adopt a far more tolerant attitude toward the mentally ill in our society"(t=-0.55, p=0.58).

Directly involved staffs show greater mean score than the supportive staff in the following items: "Increased spending on mental health services is a waste of tax dollars" (t-2.35, p=0.03), "No-one has the right to exclude the mentally ill from their neighborhood (t= -4.03, p= 0.03), "Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great" (t=2.74, p=0.01), "Mental patients need the same kind of control and discipline as a young child" (t=4.99, p=0.00) and "I would not want to live next door to someone who has been mentally ill" (t=3.57, p=0.00).

Details are shown in table 15

Table 15: Independent T test for the Social restrictiveness statement of attitudes

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
WOMAN	Equal variances assumed	0.19	0.66	0.57	70	0.57	0.21	0.37	-0.53	0.95
	Equal variances not assumed			0.56	25.92	0.58	0.21	0.38	-0.57	0.99
ASFARAS	Equal variances assumed	7.70	0.01	0.83	70.00	0.41	0.25	0.30	-0.35	0.85
	Equal variances not assumed			0.64	19.76	0.53	0.25	0.39	-0.56	1.06
LESSEMPH	Equal variances assumed	2.75	0.10	-1.37	70.00	0.18	-0.50	0.36	-1.23	0.23
	Equal variances not assumed			-1.48	30.43	0.15	-0.50	0.34	-1.19	0.19
INCREASE	Equal variances assumed	18.56	0.00	3.17	70.00	0.00	1.01	0.32	0.37	1.65
	Equal variances not assumed			2.35	19.08	0.03	1.01	0.43	0.11	1.91
NOONE	Equal variances assumed	18.32	0	-2.46	70	0.02	-0.54	0.22	-0.98	-0.10
	Equal variances not assumed			-4.03	69.48	0.00	-0.54	0.13	-0.81	-0.27
RISKS	Equal variances assumed	5.85	0.02	2.57	70.00	0.01	0.90	0.35	0.20	1.59
	Equal variances not assumed			2.74	29.64	0.01	0.90	0.33	0.23	1.56
CONTROL	Equal variances assumed	8.5	0.01	4.33	70.00	0.00	1.51	0.35	0.81	2.20
	Equal variances not assumed			4.99	34.57	0.00	1.51	0.30	0.89	2.12
TOLERANT	Equal variances assumed	0.18	0.67	-0.55	70	0.58	-0.12	0.21	-0.53	0.30
	Equal variances not assumed			-0.45	20.49	0.66	-0.12	0.26	-0.66	0.43
NEXTDOOR	Equal variances assumed	2.11	0.15	3.81	70.00	0.00	1.20	0.31	0.57	1.82
	Equal variances not assumed			3.57	24.30	0.00	1.20	0.33	0.51	1.88
ACCEPT	Equal variances assumed	0.09	0.77	-1.21	70	0.23	-0.28	0.23	-0.73	0.18
	Equal variances not assumed			-1.04	21.78	0.31	-0.28	0.26	-0.82	0.27

The results from the 2 groups regarding the benevolence statements of attitudes have also been compared, using the T-test .

As illustrated in Table 17, results from the Levene's Test for Equality of Variances indicate that, for the majority of the items in the benevolence subscale, the variability in

the 2 groups is about the same. However, the variability is significant for three items which are the following:

“Mental patients should be encouraged to assume the responsibilities of normal life”: F= 4.95, p = 0.03. For this item the t test showed that there is no significant statistical difference of the means within the 2 groups (t= -1.36, p=0.18).

The other item of note is “The best way to handle the mentally ill is to keep them behind locked doors” (F=38.70,.p= 0.00) this means that the variability between the 2 groups is significant. The T test showed that there is also a significant statistical difference of the means (t=2.94, p=0.01), the directly involved staff have a greater mean score than the supportive staff.

For the item “Anyone with a history of mental problems should be excluded from taking public office” there is a significant variability between the 2 groups (F = 14.86, p=0.00) but the T test shows no significant statistical difference of the means (t= 1.62, p=0.12).

Lastly, for the item “The mentally ill don’t deserve our sympathy”, there is a significant variability between the 2 groups (F= 10.27, p= 0.00) and the T test shows a significant statistical difference of the means between the 2 groups (t= -2.87, p=0.01).

There are no significant differences in the other items of this subscale.

Details are shown in table 16

Table 16: Independent T test for benevolence statements of attitudes

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
OUTCASTS	Equal variances assumed	1.30	0.26	-0.22	70.00	0.83	-0.09	0.40	-0.87	0.70
	Equal variances not assumed			-0.20	23.15	0.85	-0.09	0.44	-0.99	0.82
SERVICES	Equal variances assumed	3.68	0.06	-0.15	70.00	0.88	-0.04	0.27	-0.57	0.49
	Equal variances not assumed			-0.13	22.35	0.89	-0.04	0.30	-0.67	0.59
ENCOURAG	Equal variances assumed	4.95	0.03	-1.25	70.00	0.22	-0.19	0.15	-0.50	0.12
	Equal variances not assumed			-1.36	31.08	0.18	-0.19	0.14	-0.48	0.10
REASON	Equal variances assumed	0.01	0.94	1.83	70.00	0.07	0.59	0.32	-0.05	1.24
	Equal variances not assumed			1.83	26.65	0.08	0.59	0.32	-0.07	1.26
LOCKEDDO	Equal variances assumed	38.70	0.00	4.37	70.00	0.00	1.16	0.27	0.63	1.68
	Equal variances not assumed			2.94	17.78	0.01	1.16	0.39	0.33	1.98
PRISONS	Equal variances assumed	0.16	0.70	0.81	70.00	0.42	0.25	0.30	-0.36	0.85
	Equal variances not assumed			0.77	24.95	0.45	0.25	0.32	-0.41	0.90
EXCLUDED	Equal variances assumed	14.86	0.00	2.05	70.00	0.04	0.69	0.34	0.02	1.37
	Equal variances not assumed			1.62	20.10	0.12	0.69	0.43	-0.20	1.58
DOESNOTE	Equal variances assumed	0.63	0.43	0.56	70.00	0.58	0.20	0.36	-0.52	0.92
	Equal variances not assumed			0.53	24.60	0.60	0.20	0.38	-0.58	0.99
OUTDATED	Equal variances assumed	0.37	0.54	1.40	70.00	0.17	0.51	0.37	-0.22	1.24
	Equal variances not assumed			1.37	26.03	0.18	0.51	0.37	-0.25	1.27
SYMPATY	Equal variances assumed	10.27	0.00	-2.07	70.00	0.04	-0.74	0.36	-1.45	-0.03
	Equal variances not assumed			-2.87	54.72	0.01	-0.74	0.26	-1.26	-0.22

The results from the 2 groups regarding the community mental health ideology statements of attitudes have been compaired, using the T-test .

As shown in table 18, Levene's Test for Equality of Variances indicates that, for the majority of the items in the community mental health ideology subscale, the variability in the 2 groups is about the same.

However, there is a significant variability the item “It is frightening to think of people with mental problems living in residential neighborhoods”: F= 6.77, p= 0.01.

In addition, directly involved staff have a greater mean score on the following items: “Mental health facilities should be kept out of residential neighborhoods” (t=5.81, p=0.00), “One of the main causes of mental illness is a lack of self-discipline and will power” (t= -2.05,p= 0.04), “It is best to avoid anyone who has mental problems” (t= 2.14, p= 0.05), “Most women who were once patients in a mental hospital can be trusted as a baby sitters” (t= -2.04, p=0.05), and “It is frightening to think of people with mental problems living in residential neighborhoods” (t=2.38, p=0.03).

The 2 groups show no statistical differences for the rest of the items on this subscale.

Table 17: Independent T test for community mental health ideology statements of attitudes

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
DENIED	Equal variances assumed	1.45	0.23	-1.52	70.00	0.13	-0.48	0.32	-1.12	0.15
	Equal variances not assumed			-1.67	31.22	0.11	-0.48	0.29	-1.07	0.11
OUTOFRES	Equal variances assumed	0.50	0.48	5.81	70.00	0.00	1.83	0.32	1.20	2.46
	Equal variances not assumed			5.43	24.19	0.00	1.83	0.34	1.14	2.53
CAUSES	Equal variances assumed	0.28	0.60	-2.05	70.00	0.04	-0.62	0.30	-1.22	-0.02
	Equal variances not assumed			-2.04	26.43	0.05	-0.62	0.30	-1.24	0.00
RESPONSI	Equal variances assumed	0.06	0.81	-0.13	70.00	0.90	-0.03	0.23	-0.48	0.42
	Equal variances not assumed			-0.11	22.02	0.91	-0.03	0.26	-0.57	0.52
NOTBEGIV	Equal variances assumed	6.97	0.01	0.86	70.00	0.39	0.27	0.31	-0.35	0.88
	Equal variances not assumed			0.70	20.66	0.49	0.27	0.38	-0.52	1.06
FEAR	Equal variances assumed	0.48	0.49	-0.24	70.00	0.81	-0.07	0.30	-0.67	0.53
	Equal variances not assumed			-0.21	22.35	0.84	-0.07	0.34	-0.78	0.64
VIRTUALL	Equal variances assumed	0.02	0.89	-0.92	70.00	0.36	-0.24	0.26	-0.76	0.28
	Equal variances not assumed			-0.84	23.40	0.41	-0.24	0.29	-0.83	0.35
AVOID	Equal variances assumed	1.04	0.31	2.14	70.00	0.04	0.81	0.38	0.06	1.57
	Equal variances not assumed			2.03	24.61	0.05	0.81	0.40	-0.01	1.64
BABYSITT	Equal variances assumed	0.56	0.46	-2.04	70.00	0.05	-0.80	0.39	-1.57	-0.02
	Equal variances not assumed			-2.05	26.68	0.05	-0.80	0.39	-1.60	0.00
FRIGHTEN	Equal variances assumed	6.77	0.01	2.78	70.00	0.01	0.88	0.32	0.25	1.52
	Equal variances not assumed			2.38	21.73	0.03	0.88	0.37	0.11	1.66

4.2. Relationship between Attitudes and profile of the participants

Each of the demographic or control variables was initially examined to determine the relationship between each predictor and the dependent variables.
This allowed the researcher to observe early patterns in the data before employing more rigorous analyses.

4.2.1. Authoritarianism

The demographic variables gender, age, family status, role, category, education, background and experience did not significantly account for variance in the model with each of the individual predictors and authoritarianism as the dependent variable at $p>0.05$.
As indicated in the following table, all the tests performed do not show any significance ($P>0.05$).
Tests of Between-Subjects Effects have been conducted and showed no significance as p is always greater than 0.05.

Table 18: Multivariate test for authoritarianism

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter
GENDER	Pillai's Trace	0.12	0.76	10	53	0.67	0.12	7.55
	Wilks' Lambda	0.88	0.76	10	53	0.67	0.12	7.55
	Hotelling's Trace	0.14	0.76	10	53	0.67	0.12	7.55
	Roy's Largest Root	0.14	0.76	10	53	0.67	0.12	7.55
AGE	Pillai's Trace	0.12	0.75	10	53	0.68	0.12	7.47
	Wilks' Lambda	0.88	0.75	10	53	0.68	0.12	7.47
	Hotelling's Trace	0.14	0.75	10	53	0.68	0.12	7.47
	Roy's Largest Root	0.14	0.75	10	53	0.68	0.12	7.47
FAMILYST	Pillai's Trace	0.14	0.89	10	53	0.55	0.14	8.89
	Wilks' Lambda	0.86	0.89	10	53	0.55	0.14	8.89
	Hotelling's Trace	0.17	0.89	10	53	0.55	0.14	8.89
	Roy's Largest Root	0.17	0.89	10	53	0.55	0.14	8.89
EDUCATIO	Pillai's Trace	0.11	0.67	10	53	0.75	0.11	6.68
	Wilks' Lambda	0.89	0.67	10	53	0.75	0.11	6.68
	Hotelling's Trace	0.13	0.67	10	53	0.75	0.11	6.68
	Roy's Largest Root	0.13	0.67	10	53	0.75	0.11	6.68
ROLE	Pillai's Trace	0.25	1.78	10	53	0.09	0.25	17.79
	Wilks' Lambda	0.75	1.78	10	53	0.09	0.25	17.79
	Hotelling's Trace	0.34	1.78	10	53	0.09	0.25	17.79
	Roy's Largest Root	0.34	1.78	10	53	0.09	0.25	17.79
BACKGROU	Pillai's Trace	0.16	1.03	10	53	0.43	0.16	10.33
	Wilks' Lambda	0.84	1.03	10	53	0.43	0.16	10.33
	Hotelling's Trace	0.19	1.03	10	53	0.43	0.16	10.33
	Roy's Largest Root	0.19	1.03	10	53	0.43	0.16	10.33
EXPERIEN	Pillai's Trace	0.17	1.09	10	53	0.39	0.17	10.86
	Wilks' Lambda	0.83	1.09	10	53	0.39	0.17	10.86
	Hotelling's Trace	0.20	1.09	10	53	0.39	0.17	10.86
	Roy's Largest Root	0.20	1.09	10	53	0.39	0.17	10.86
CATEGORY	Pillai's Trace	0.26	1.90	10	53	0.07	0.26	19.03
	Wilks' Lambda	0.74	1.90	10	53	0.07	0.26	19.03
	Hotelling's Trace	0.36	1.90	10	53	0.07	0.26	19.03
	Roy's Largest Root	0.36	1.90	10	53	0.07	0.26	19.03

4.2.2. Benevolence

Similar to the non-significant predictors on the dependent variable authoritarianism, the variables gender, age, family status, experience, category, education, role and background did not significantly account for the variance in benevolence.
Box's Test of Equality of Covariance Matrices was performed and showed that the variances are equal within the groups.
Also the Tests of Between-Subjects Effects did not highlight any significant relationship between the benevolence attitudes and the profile of the participants.

Table 19: Multivariate test for the benevolence attitudes

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
GENDER	Pillai's Trace	0.17	1.09	10	53	0.38	0.17	10.93	0.51
	Wilks' Lambda	0.83	1.09	10	53	0.38	0.17	10.93	0.51
	Hotelling's Trace	0.21	1.09	10	53	0.38	0.17	10.93	0.51
	Roy's Largest Root	0.21	1.09	10	53	0.38	0.17	10.93	0.51
AGE	Pillai's Trace	0.16	0.99	10	53	0.46	0.16	9.90	0.46
	Wilks' Lambda	0.84	0.99	10	53	0.46	0.16	9.90	0.46
	Hotelling's Trace	0.19	0.99	10	53	0.46	0.16	9.90	0.46
	Roy's Largest Root	0.19	0.99	10	53	0.46	0.16	9.90	0.46
FAMILYST	Pillai's Trace	0.20	1.30	10	53	0.25	0.20	13.01	0.60
	Wilks' Lambda	0.80	1.30	10	53	0.25	0.20	13.01	0.60
	Hotelling's Trace	0.25	1.30	10	53	0.25	0.20	13.01	0.60
	Roy's Largest Root	0.25	1.30	10	53	0.25	0.20	13.01	0.60
EDUCATIO	Pillai's Trace	0.24	1.68	10	53	0.11	0.24	16.75	0.73
	Wilks' Lambda	0.76	1.68	10	53	0.11	0.24	16.75	0.73
	Hotelling's Trace	0.32	1.68	10	53	0.11	0.24	16.75	0.73
	Roy's Largest Root	0.32	1.68	10	53	0.11	0.24	16.75	0.73
ROLE	Pillai's Trace	0.13	0.78	10	53	0.65	0.13	7.81	0.36
	Wilks' Lambda	0.87	0.78	10	53	0.65	0.13	7.81	0.36
	Hotelling's Trace	0.15	0.78	10	53	0.65	0.13	7.81	0.36
	Roy's Largest Root	0.15	0.78	10	53	0.65	0.13	7.81	0.36
BACKGROU	Pillai's Trace	0.21	1.42	10	53	0.20	0.21	14.21	0.64
	Wilks' Lambda	0.79	1.42	10	53	0.20	0.21	14.21	0.64
	Hotelling's Trace	0.27	1.42	10	53	0.20	0.21	14.21	0.64
	Roy's Largest Root	0.27	1.42	10	53	0.20	0.21	14.21	0.64
EXPERIEN	Pillai's Trace	0.12	0.74	10	53	0.69	0.12	7.39	0.34
	Wilks' Lambda	0.88	0.74	10	53	0.69	0.12	7.39	0.34
	Hotelling's Trace	0.14	0.74	10	53	0.69	0.12	7.39	0.34
	Roy's Largest Root	0.14	0.74	10	53	0.69	0.12	7.39	0.34
CATEGORY	Pillai's Trace	0.23	1.62	10	53	0.13	0.23	16.18	0.71
	Wilks' Lambda	0.77	1.62	10	53	0.13	0.23	16.18	0.71
	Hotelling's Trace	0.31	1.62	10	53	0.13	0.23	16.18	0.71
	Roy's Largest Root	0.31	1.62	10	53	0.13	0.23	16.18	0.71

4.2.3. Social Restrictiveness

All the independent variables studied were not significant as the significance was greater than 0.05 in all the cases.
This indicates that the variables age, gender, education, category, family status, role, experience and background do not have influence on the attitudes of the personnel.

Table 20: Multivariate test for social restrictiveness

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter
GENDER	Pillai's Trace	0.09	0.55	10	53	0.85	0.09	5.49
	Wilks' Lambda	0.91	0.55	10	53	0.85	0.09	5.49
	Hotelling's Trace	0.10	0.55	10	53	0.85	0.09	5.49
	Roy's Largest Root	0.10	0.55	10	53	0.85	0.09	5.49
AGE	Pillai's Trace	0.16	1.00	10	53	0.45	0.16	10.01
	Wilks' Lambda	0.84	1.00	10	53	0.45	0.16	10.01
	Hotelling's Trace	0.19	1.00	10	53	0.45	0.16	10.01
	Roy's Largest Root	0.19	1.00	10	53	0.45	0.16	10.01
FAMILYST	Pillai's Trace	0.11	0.62	10	53	0.79	0.11	6.24
	Wilks' Lambda	0.89	0.62	10	53	0.79	0.11	6.24
	Hotelling's Trace	0.12	0.62	10	53	0.79	0.11	6.24
	Roy's Largest Root	0.12	0.62	10	53	0.79	0.11	6.24
EDUCATIO	Pillai's Trace	0.25	1.73	10	53	0.10	0.25	17.25
	Wilks' Lambda	0.75	1.73	10	53	0.10	0.25	17.25
	Hotelling's Trace	0.33	1.73	10	53	0.10	0.25	17.25
	Roy's Largest Root	0.33	1.73	10	53	0.10	0.25	17.25
ROLE	Pillai's Trace	0.34	2.79	10	53	0.01	0.34	27.91
	Wilks' Lambda	0.66	2.79	10	53	0.01	0.34	27.91
	Hotelling's Trace	0.53	2.79	10	53	0.01	0.34	27.91
	Roy's Largest Root	0.53	2.79	10	53	0.01	0.34	27.91
BACKGROU	Pillai's Trace	0.19	1.25	10	53	0.28	0.19	12.48
	Wilks' Lambda	0.81	1.25	10	53	0.28	0.19	12.48
	Hotelling's Trace	0.24	1.25	10	53	0.28	0.19	12.48
	Roy's Largest Root	0.24	1.25	10	53	0.28	0.19	12.48
EXPERIEN	Pillai's Trace	0.15	0.97	10	53	0.48	0.15	9.67
	Wilks' Lambda	0.85	0.97	10	53	0.48	0.15	9.67
	Hotelling's Trace	0.18	0.97	10	53	0.48	0.15	9.67
	Roy's Largest Root	0.18	0.97	10	53	0.48	0.15	9.67
CATEGORY	Pillai's Trace	0.46	4.54	10	53	0.00	0.46	45.39
	Wilks' Lambda	0.54	4.54	10	53	0.00	0.46	45.39
	Hotelling's Trace	0.86	4.54	10	53	0.00	0.46	45.39
	Roy's Largest Root	0.86	4.54	10	53	0.00	0.46	45.39

4.2.4. Community Mental Health Ideology

The variables gender, age, family status, experience, category, education, and background did not significantly account for variance in community mental health ideology attitudes at $p>0.05$.
The variable role was again a significant predictor ($F = 2.45$, $p= .02$, eta squared 0.32).

Table 21: Multivariate for community mental health ideology

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
GENDER	Pillai's Trace	0.16	0.98	10	53.00	0.47	0.16	9.81	0.45
	Wilks' Lambda	0.84	0.98	10	53.00	0.47	0.16	9.81	0.45
	Hotelling's Trace	0.19	0.98	10	53.00	0.47	0.16	9.81	0.45
	Roy's Largest Root	0.19	0.98	10	53.00	0.47	0.16	9.81	0.45
AGE	Pillai's Trace	0.07	0.42	10	53.00	0.93	0.07	4.18	0.19
	Wilks' Lambda	0.93	0.42	10	53.00	0.93	0.07	4.18	0.19
	Hotelling's Trace	0.08	0.42	10	53.00	0.93	0.07	4.18	0.19
	Roy's Largest Root	0.08	0.42	10	53.00	0.93	0.07	4.18	0.19
FAMILYST	Pillai's Trace	0.17	1.04	10	53.00	0.42	0.17	10.44	0.48
	Wilks' Lambda	0.84	1.04	10	53.00	0.42	0.17	10.44	0.48
	Hotelling's Trace	0.20	1.04	10	53.00	0.42	0.17	10.44	0.48
	Roy's Largest Root	0.20	1.04	10	53.00	0.42	0.17	10.44	0.48
EDUCATIO	Pillai's Trace	0.15	0.92	10	53.00	0.52	0.15	9.23	0.43
	Wilks' Lambda	0.85	0.92	10	53.00	0.52	0.15	9.23	0.43
	Hotelling's Trace	0.17	0.92	10	53.00	0.52	0.15	9.23	0.43
	Roy's Largest Root	0.17	0.92	10	53.00	0.52	0.15	9.23	0.43
ROLE	Pillai's Trace	0.32	2.45	10	53.00	0.02	0.32	24.53	0.90
	Wilks' Lambda	0.68	2.45	10	53.00	0.02	0.32	24.53	0.90
	Hotelling's Trace	0.46	2.45	10	53.00	0.02	0.32	24.53	0.90
	Roy's Largest Root	0.46	2.45	10	53.00	0.02	0.32	24.53	0.90
BACKGROU	Pillai's Trace	0.22	1.49	10	53.00	0.17	0.22	14.93	0.67
	Wilks' Lambda	0.78	1.49	10	53.00	0.17	0.22	14.93	0.67
	Hotelling's Trace	0.28	1.49	10	53.00	0.17	0.22	14.93	0.67
	Roy's Largest Root	0.28	1.49	10	53.00	0.17	0.22	14.93	0.67

EXPERIEN	Pillai's Trace	0.12	0.75	10	53.00	0.67	0.12	7.50	0.34
	Wilks' Lambda	0.88	0.75	10	53.00	0.67	0.12	7.50	0.34
	Hotelling's Trace	0.14	0.75	10	53.00	0.67	0.12	7.50	0.34
	Roy's Largest Root	0.14	0.75	10	53.00	0.67	0.12	7.50	0.34
CATEGORY	Pillai's Trace	0.48	4.80	10	53.00	0.00	0.48	48.01	1.00
	Wilks' Lambda	0.53	4.80	10	53.00	0.00	0.48	48.01	1.00
	Hotelling's Trace	0.91	4.80	10	53.00	0.00	0.48	48.01	1.00
	Roy's Largest Root	0.91	4.80	10	53.00	0.00	0.48	48.01	1.00

The belief concerning the need to ask the mentally ill patients about their preferences and to involve them in the decision-making process has been examined by two questions that were added to the questionnaires.
The majority of directly involved staff members agree to ask mentally ill patients about their preferences (45 or 81.82%) while the majority of support staff members do not agree (13 or 76.47%).

Table 22: Beliefs of the respondents about asking patients their preferences

Should we ask the persons with mental illness about their preferences?					
	Directly involved staff members		Support Staff members		
	N	%	N	%	
Yes	45	81.82	4	23.53	P = 0.00
No	10	18.18	13	76.47	
Total	55	100	17	100	

The majority of the staff members (48 or 87.27%) think that the staff member, consumers and their families should be involved in the decision-making process.

Support staff members also think it is good to involve the staff member, consumers and their families in this process (48 or 70.59%).

Table 23: Beliefs of the respondents on involving the mentally ill in decision-making

Who should be involved in the decision-making regarding personal programs for persons with mental illness?'					
	Directly involved staff members		**Support Staff members**		**Difference**
	N	%	N	%	
Staff member	4	7.27	4	23.53	
Staff member and the consumers	1	1.82	1	5.88	
Staff member, consumers and their families	48	87.27	12	70.59	
Persons with psychiatric disabilities	2	3.64	0	0	P= 0.03
Total	55	100	17	100	

4.3. Correlations Between Inclusion And Involvement In Decision-Making

As shown in the following tables, there is no correlation between attitudes of the professionals towards the mentally ill and involvement in the process of decision-making. Details are in the tables 25, 26, 27 and 28. However, Note that there is a significant correlation in Table 25 item ‘Mental illness is an illness like any other’ p=0.028.

Table 24: Spearman's correlation between authoritarianism and inclusion in decision making

		PREFEREN	DECISION
As soon as a person shows signs of mental disturbance, he should be hospitalized.	Correlation Coefficient	-0.033	0.026
	Sig. (2-tailed)	0.781	0.829
	N	72	72
More tax money should be spent on the care and treatment of the mentally ill.	Correlation Coefficient	0.264	0.007
	Sig. (2-tailed)	0.025	0.951
	N	72	72
The mentally ill should not be isolated from the rest of the community	Correlation Coefficient	0.16	-0.169
	Sig. (2-tailed)	0.179	0.156
	N	72	72
The best therapy for many mental patients is to be part of a normal community	Correlation Coefficient	0.062	0.047
	Sig. (2-tailed)	0.605	0.696
	N	72	72
Mental illness is an illness like any other	Correlation Coefficient	-0.183	0.258
	Sig. (2-tailed)	0.125	0.028
	N	72	72
The mentally ill are a burden on society	Correlation Coefficient	0.102	0.016
	Sig. (2-tailed)	0.394	0.895
	N	72	72
The mentally ill are far less of a danger than most people suppose	Correlation Coefficient	-0.27	0.188
	Sig. (2-tailed)	0.022	0.113
	N	72	72
Locating mental health facilities in a residential area downgrades the neighborhood.	Correlation Coefficient	-0.151	-0.002
	Sig. (2-tailed)	0.205	0.987
	N	72	72
There is something about the mentally ill that makes it easy to tell them from normal people	Correlation Coefficient	0.016	0.183
	Sig. (2-tailed)	0.897	0.123
	N	72	72
The mentally ill have for too long been the subject of ridicule	Correlation Coefficient	0.163	0.043
	Sig. (2-tailed)	0.17	0.722
	N	72	72

Table 25: Spearmen's correlation between social restrictiveness and inclusion in decision making

		PREFEREN	DECISION
A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered	Correlation Coefficient	-0.045	-0.144
	Sig. (2-tailed)	0.708	0.227
	N	72	72
As far as possible mental health services should be provided through community based facilities	Correlation Coefficient	-0.083	-0.004
	Sig. (2-tailed)	0.487	0.976
	N	72	72
Less emphasis should be placed on protecting the public from the mentally ill	Correlation Coefficient	0.062	0.046
	Sig. (2-tailed)	0.604	0.703
	N	72	72
Increased spending on mental health services is a waste of tax dollars	Correlation Coefficient	-0.140	-0.041
	Sig. (2-tailed)	0.241	0.734
	N	72	72
No-one has the right to exclude the mentally ill from their neighborhood	Correlation Coefficient	0.015	-0.136
	Sig. (2-tailed)	0.902	0.256
	N	72	72
Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great	Correlation Coefficient	-0.365	0.110
	Sig. (2-tailed)	0.002	0.360
	N	72	72
Mental patients need the same kind of control and discipline as a young child	Correlation Coefficient	-0.344	0.211
	Sig. (2-tailed)	0.003	0.075
	N	72	72
We need to adopt a far more tolerant attitude toward the mentally ill in our society	Correlation Coefficient	0.019	0.024
	Sig. (2-tailed)	0.873	0.844
	N	72	72
I would not want to live next door to someone who has been mentally ill	Correlation Coefficient	-0.320	0.067
	Sig. (2-tailed)	0.006	0.578
	N	72	72
Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community	Correlation Coefficient	0.034	0.089
	Sig. (2-tailed)	0.777	0.456
	N	72	72

Table 26: Spearman's correlation between benevolence and inclusion in the decision making

		PREFEREN	DECISION
The mentally ill should not be treated as outcasts of society	Correlation Coefficient	-0.102	-0.040
	Sig. (2-tailed)	0.392	0.739
	N	72	72
There are sufficient existing services for the mentally ill	Correlation Coefficient	0.065	-0.002
	Sig. (2-tailed)	0.584	0.989
	N	72	72
Mental patients should be encouraged to assume the responsibilities of normal life	Correlation Coefficient	0.003	-0.128
	Sig. (2-tailed)	0.980	0.285
	N	72	72
Local residents have good reason to resist the location of mental health services in their neighborhood	Correlation Coefficient	-0.183	-0.135
	Sig. (2-tailed)	0.125	0.258
	N	72	72
The best way to handle the mentally ill is to keep them behind locked doors	Correlation Coefficient	-0.252	0.023
	Sig. (2-tailed)	0.033	0.849
	N	72	72
Our mental hospitals seem more like prisons than places where the mentally ill can be cared for	Correlation Coefficient	-0.100	0.018
	Sig. (2-tailed)	0.404	0.883
	N	72	72
Anyone with a history of mental problems should be excluded from taking public office	Correlation Coefficient	-0.028	0.148
	Sig. (2-tailed)	0.813	0.215
	N	72	72
Locating mental health services in residential neighborhoods' does not endanger local residents	Correlation Coefficient	0.018	0.128
	Sig. (2-tailed)	0.880	0.285
	N	72	72
Mental hospitals are an out-dated means of treating the mentally ill	Correlation Coefficient	-0.166	-0.081
	Sig. (2-tailed)	0.164	0.496
	N	72	72
The mentally ill don't deserve our sympathy	Correlation Coefficient	0.114	-0.082
	Sig. (2-tailed)	0.342	0.493
	N	72	72

Table 27: Spearman's correlation between community mental health ideology and inclusion in decision making

		PREFEREN	DECISION
The mentally ill should not be denied their individual rights	Correlation Coefficient	0.165	-0.143
	Sig. (2-tailed)	0.167	0.232
	N	72	72
Mental health facilities should be kept out of residential neighborhoods	Correlation Coefficient	-0.287	0.002
	Sig. (2-tailed)	0.014	0.988
	N	72	72
One of the main causes of mental illness is a lack of self-discipline and will power	Correlation Coefficient	0.172	-0.101
	Sig. (2-tailed)	0.148	0.401
	N	72	72
We have a responsibility to provide the best possible care for the mentally ill	Correlation Coefficient	0.003	-0.146
	Sig. (2-tailed)	0.981	0.222
	N	72	72
The mentally ill should not be given any responsibility	Correlation Coefficient	-0.258	0.186
	Sig. (2-tailed)	0.029	0.117
	N	72	72
Residents have nothing to fear from people coming into their neighborhood to obtain mental health services.	Correlation Coefficient	0.006	0.013
	Sig. (2-tailed)	0.958	0.916
	N	72	72
Virtually anyone can become mentally ill	Correlation Coefficient	0.082	0.007
	Sig. (2-tailed)	0.494	0.957
	N	72	72
It is best to avoid anyone who has mental problems.	Correlation Coefficient	-0.287	-0.050
	Sig. (2-tailed)	0.015	0.674
	N	72	72
Most women who were once patients in a mental hospital can be trusted as baby sitters.	Correlation Coefficient	0.063	-0.054
	Sig. (2-tailed)	0.597	0.650
	N	72	72
It is frightening to think of people with mental problems living in residential neighborhoods’	Correlation Coefficient	-0.307	0.112
	Sig. (2-tailed)	0.009	0.349
	N	72	72

CHAPTER 5: DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Discussion

The primary goal of the health professionals is to provide care for all individuals irrespective of their personal circumstance.

Important findings emerged from studies examining the public attitudes toward people with mental illness. One of them is that the public perceives people with mental illness as violent, unstable, and socially undesirable.

In addition to this, many arguments against the placement of community mental health facilities revolve around issues of safety, such as risks posed to young children (Cowan, 1999).

The CAMI scale has been a popular measure to examine community attitudes, and it has been frequently administered and even modified to use internationally.

The present study showed that for the authoritarianism, which refers to a view of the mentally ill person as someone inferior who requires coercive handling, our respondents agreed with the positive statements and disagreed with the negative ones. This means that they did not believe that the mentally ill are inferior.

They, however, think that as soon as a person shows signs of mental disturbances, he should be hospitalized (51%). The reason for this may probably be the fact that their hospital is the only in the country that can hospitalize patients for a long time and the mental health services in the general hospitals are at the early stage of development, hence, not yet well organized. Psychotropic medications are not fully available throughout the community and the resources are scarce. Probably this reflects the general view on mentally illness in the general population.

For the social restrictiveness subscale, our respondents agreed with the positive statements and disagreed with the negative ones. The majority think that no one has the right to exclude the mentally ill from the community, but they show differences on the items " increased spending money on mental health services is a waste of tax dollars, "Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great", "Mental patients need the same kind of control and discipline as a young child", and "I would not want to live next door to someone who has been mentally ill". This may be due to the fact that they receive the patients who are mainly abandoned and neglected in the streets. As there are scarce interventions in the community, the patients who are brought to Ndera hospital are those with neglected hygiene, with agitation and aggressivity and other conditions not easy to be with as they think. In general, our respondents do not think that the mentally ill patients are a threat to the society; they think that they should not be avoided.

The majority of our respondents showed a paternalistic and sympathetic view of the mentally ill patient. With the mean score of 3.88, they show an orientation toward care in general. The conclusion is that our respondents hold favorable attitudes towards mentally ill patients.

Concerning the acceptance of mental health services and mentally ill patients in the community, the mean score (3.87) showed that the majority of our respondents agreed with the positive attitudes and disagreed with the negative ones. All are convinced that they have a responsibility to provide the possible best care for the mentally illl patients.

In fact, the study conducted by Aghukwa Chikaodiri N. (2009) found many hospital workers, especially females, expressed anticipatory fears towards letting psychiatric patients obtain admission for treatment within a general hospital setting. This view was very likely caused by many workers not wishing their place of work to be close to the psychiatric wards. From this study, many nurses, administrators, hospital support staff and laboratory scientists would support resisting provision of such an inpatient care facility inside the hospital because of the communities' attribution of dangerousness to people with mental illness, because of occasional violent behaviour by them.

This differs from the results from our study, due to the fact that the professionals at the psychiatric hospital have more time to spend together with the patients and to discuss with them and this means that they have more compassion compared to the other health professionals in general hospitals.

Although the majority of our respondents thought the best therapy for mentally ill should be organized in the community, they also thought that as soon as a patient shows mental disturbance signs, he should be hospitalized. This discrepancy might perhaps be related to the scarcity of resources and the presence of the treatment gap with regard to mental illness, especially at the community level.

Our findings support the previous work of Antonia Barke and collaborators in Ghana (Barke A. et al., 2010), who showed that regarding the society’s attitude towards mentally ill patients, benevolent views tended to prevail and the responsibility of providing the best possible care was acknowledged by a large majority.

The first hypothesis for the current study was that directly involved professionals’ attitudes toward the inclusion of persons with psychiatric disabilities would be more positive than supportive staff's attitudes.

The results showed that for the majority of the items in the authoritarianism subscale, the scores of the group of directly involved staff do not vary significantly from the scores of the supporting staff ($p.>0.05$).

However, there is a significant difference of means on the item “More tax money should be spent on the care and treatment of the mentally ill”. The comparison of the 2 groups showed that the mean score for the directly involved is greater than the score of the supportive staff for this item.

The directly involved professionals also have a higher mean score on the item “The best therapy for many mental patients is to be part of a normal community”.

This means that the directly involved professionals are more in favor of increasing tax money on the care and treatment of the mentally ill, and in organising the best therapy in the community.

Directly involved staff showed greater mean scores on positive attitudes than the supportive staff for the following items from the social restrictiveness subscale: “Increased spending on mental health services is a waste of tax dollars”, “No-one has the right to exclude the mentally ill from their neighborhood, “Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great”, “Mental patients need the same kind of control and discipline as a young child” and “I would not want to live next door to someone who has been mentally ill”.

Directly involved professionals showed greater mean scores on positive attitudes for the items “Mental patients should be encouraged to assume the responsibilities of normal life”, “The best way to handle the mentally ill is to keep them behind locked doors”, “Anyone with a history of mental problems should be excluded from taking public office” and “The mentally ill don’t deserve our sympathy”,

In addition, directly involved staff have greater mean scores on positive attitudes for the following items: “Mental health facilities should be kept out of residential neighborhoods”, “One of the main causes of mental illness is a lack of self-discipline and will power”, “It is best to avoid anyone who has mental problems”, “Most women who were once patients in a mental hospital can be trusted as a baby sitters”, and “It is frightening to think of people with mental problems living in residential neighborhoods”.

The general finding is that our hypothesis is confirmed, the directly involved professionals’ attitudes towards mental illness are more positive than the support professionals’ attitudes.

This support the previous findings, for example those from Mitsuko Yamada et al. (2001)who investigated nursing students’ attitudes toward people with mental disorders and showed that nursing students having the experience of contact with people with mental disorders had positive attitudes toward them.

This is surely the reason why directly involved professionals are more positive than the support professionals at Ndera neuropsychiatric hospital.

A study by Nikolaos Kazantzis (2009), found that respondents with high levels of prior contact with people who have a mental illness were more comfortable in interacting with people who have a mental illness.

Prior research has consistently reported that contact with people with mental illness influences positive attitudes, as well as increases the level of comfort in interacting with people with mental illness (e.g., Arens, 1993; Beckwith & Mathews, 1994; Gething & Wheeler, 1992).

In an international comparative study of nurses' attitudes towards mental illness, Chambers et al. (2009) showed that nurses working in mental health settings from Lithuania expressed more negative attitudes than those from Finland, Italy, Portugal and Ireland. The authors suggest these negative attitudes are the result of social, cultural or organizational factors.

Another objective was to identify possible factors which influence the attitude towards mentally ill people in Ndera Neuropsychiatric hospital.
The findings suggest that the demographic variables gender, age, family status, role, category, education, background and experience did not significantly account for variance in the model with each of the individual predictors and the subscales of the CAMI scale.
This indicates that all these demographic variables background do not exert an influence on the attitudes of the personnel.
The last hypothesis was that directly involved professionals will have a stronger belief in the need to include consumers in the decision-making process about their future than the supportive staff workers.

This assumption was supported by our results, as the majority of directly involved staff members agree to ask mentally ill patients about their preferences while the majority of support staff members do not agree.

Conclusions

Health care professionals should be explicitly made aware of the impact their judgments of disadvantaged groups can have on their caring role.
By drawing attention to these often ingrained or subconscious judgments, they may be able to overcome any inherent prejudice and meet the demands of their patients irrespective of individual circumstance.
This study represents one of the first to explore professionals' attitudes towards the mentally ill. It is hoped that this work will highlight the need to explore the influence of attitudes in the delivery of high quality healthcare. The provider–patient relationship is at the heart of effective treatment and the detrimental impact of prejudicial judgments on this relationship should not be ignored.

A summary interpretation of the main findings in this thesis reinforces the assumption that negative attitudes towards people with mental illness received in Ndera neuropsychiatric hospital are in existence, even though the majority have favorable attitudes toward the mentally ill.

This study also demonstrates that professionals with different roles report different attitudes, and this suggest that they would behave differently towards patients with mental illness. The directly involved professionals have been found to have more positive attitudes than the supportive professional and this seems to show that as individuals improve their ability to interact with persons with mental illness, they become more tolerant.

The present study demonstrates that the sociodemographic variables tested have no impact on the attitudes of the professionals working in Ndera neuropsychiatric hospital.

The extent of mental health training (as part of general health training) and duration of experience of working in mental health settings did not influence attitudes.

Training influences could be expected to be minimal because most respondents had received only limited mental health training during their undergraduate education.

Finally, this study demonstrates that there is no correlation between the attitudes towards mentally ill patients and their inclusion in the process of decision-making.

Recommendations

i. As the professionals have different views on the mental illness, activities aiming the fight against stigma and negative attitudes towards the mentally ill should be organized frequently in the hospital.

ii. There are still many areas to explore within the field of attitudes to mental illness and persons with mental illness in Rwanda:

   - Since mental health services are not well organized in the community, there is a need for further research on the attitudes towards mentally ill in the general population

   - It would be of interest to explore what people with mental illness themselves consider, regarding these research findings as well as their experiences of contact with the public.
   - More research is needed to shed light on the relationship between attitudes towards persons with mental illness and the respondent's actual behavior and actions against them.
   - It is hard to know if the displayed attitude is in accordance with the respondent's inner belief or if it is an idealized description, so called 'Beautiful Painting' in order to position oneself as politically correct.

Therefore it is of interest to explore if it is possible to adapt the CAMI scale to the Rwandan population

REFERENCES

ABDURRAHMAN ALTINDAG, Effects of an antistigma program on medical students' Attitudes towards people with schizophrenia, Psychiatry and Clinical Neurosciences (2006), 60, 283–288

Aghukwa, N.C., *Attitude of health workers to the care of psychiatric patients*, Annals of General Psychiatry 2009, 8:19

A.M. Aish et al., Measuring Attitudes of Mental Health Care Staff Toward Suicidal Patients, Archives of Suicide Research, 6:309^323, 2002

Amanda M. Stone and Lisa J. Merlo, Attitudes of college students toward mental illness stigma and the misuse of psychiatric medications,J Clin Psychiatry. 2011 February ; 72(2): 134–139

Angermeyer MC, Matschinger H, The stigma of mental illness: effects of labelling on public attitudes towards people with mental disorder, Acta Psychiatr Scand 2003: 108: 304–309

Baello, J., *Asian Values Adherence and Psychological Help-Seeking Attitudes of Filipino* American Journal of Multicultural, Gender and Minority Studies, Volume 1, Issue 1, 2007

Baba A Issa et al., *Attitudes of Medical Students to Psychiatry at a Nigerian Medical School*, Hong Kong J Psychiatry 2009; 19:72-7

Baba A Issa,et al., *Caregivers' Knowledge of Etiology of Mental Illness in a Tertiary Health Institution in Nigeria*, Iranian Journal of Psychiatry and Behavioral Sciences (IJPBS), Volume 2, Number 1, Spring and Summer 2008: 43-49.

BARBARA W. and SIMON W., Personality and social attitudes in chronic fatigue syndrome, Journal of Psychosomatic Research, Vol. 47, No. 4, pp. 385–397, 1999

Barke A., Nyarko S, Klecha D., The stigma of mental illness in Southern Ghana: attitudes of the urban population and patients' views, Soc Psychiat Epidemiol, 2010

Bayram Mert Savrun., et al., Gender Effect onAttitudes Towards theMentally Ill: A Survey of Turkish University Students, Isr J Psychiatry Relat Sci Vol 44 No. 1 (2007) 57–61

Bedel C.T. et al., *Family Attitudes Reported in Youth as Potential Predictors of Cancer*, Psychosomatic Medicine Vol. 41, No. 4 (June 1979)

Borinstein A.B., Public attitudes toward persons with mental illness, *Health Affairs*, 11, no.3 (1992):186-196

Bresssoud E. (2002), La force de l'attitude: clarification conceptuelle et impact au sein du processus comportemental, Actes des XVIèmes Journées Nationales des IAE, Paris.

David T. Browne, ATTITUDES OF MENTAL HEALTH PROFESSIONALS TOWARD MENTAL ILLNESS: COMPARISONS AND PREDICTORS, David T. Browne, Thesis, Smith College School for Social Work Northampton, Massachusetts, 2010

Campbell Research & Consulting, Community Attitudes towards Palliative Care Integrated Report, A report funded by the Australian Government Department of Health and Ageing, Commonwealth of Australia 2006

Carlyle London, Stigma and mental illness: a comparative study of attitudes and personal constructs; Thesis, School of health science and social care, Brunel University, January 2010.

Caroline Roberts, Mental Health Professionals' Attitudes towards Legal Compulsion: Report of a National Survey, International Journal of Forensic Mental Health 2002, Vol. 1, No. 1, pages 71-82

Carlos Nordt, Attitudes of Mental Health Professionals Toward People With Schizophrenia and Major Depression, Schizophrenia Bulletin vol. 32 no. 4 pp. 709–714, 2006

American Medical Association, Attitudes toward Mental Illness— 35 states, District of Columbia, and Puerto Rico, 2007, JAMA, July 14, 2010—Vol 304, No. 2

Barbara Lopes Cardozo, et al., Mental Health, Social Functioning, and Attitudes of Kosovar Albanians Following the War in Kosovo, JAMA, August 2, 2000—Vol 284, No. 5

CHIKOMO, J.G, Knowledge and attitudes of the Kinondoni community towards mental illness, Thesis, STELLENBOSCH UNIVERSITY, MARCH 2011

Christopher Ryan Locke, *Public attitudes toward mental illness: an experimental design examining the media's impact of crime on stigma*, unpublished thesis, Ohio University, 2010.

Clayfield, C.J., Fletcher, K.E., Assessing Police Attitudes about Persons with Mental Illness, Center for Mental Health Services Research, University of Massachusetts Medical School, April 2006, Vol 3, Issue 4

Collins, C.W., *Attitude toward a Handicap*, Journal Of The National Medical Association, VOL. 48, No. 3

Daniel le Grange, Eating Attitudes and Behaviors in 1,435 South African Caucasian and Non-Caucasian College Students, (Am J Psychiatry 1998; 155:250–254)

Deris, J.A., A SEMANTIC DIFFERENTIAL MEASUREMENT OF CAREGIVERS'* ATTITUDES TOWARD THE ALCOHOLIC, Thesis, May, 1973

DUPRAS A., Les réactions du personnel soignant au comportement de masturbation des patients psychiatriques, Revue québécoise de psychologie, vol. 17, n° 2, 199 6

Edgerton, J.V., Bentz, K.W., *Attitudes and opinions of rural people about mental illness and program services,* Rural mental health services, MARCH, 1969, VOL. 59, NO. 3, A.J.P.H.

ERLANGER A. TURNER, *Attitudes toward Child Mental Health Services: Adaptation and Development of an Attitude Scale*, Thesis, Office of Graduate Studies of Texas A&M University, August 2006

Ewhrudjakpor, C.Knowledge, Beliefs and Attitudes of Health Care Providers towards the Mentally Ill in Delta State, Nigeria, Ethno-Med, 3(1): 19-25 (2009)

Feifel, D., Attitudes toward Psychiatry as a Prospective Career among Students Entering Medical School, Am J Psychiatry 1999; 156:1397–1402)

Filipcic I.et al.: Attitudes Towards Schizophrenic Patient, Coll. Antropol. 27 (2003) 1: 301–307

Gen Kanayama, Body Image and Attitudes Toward Male Roles in Anabolic-Androgenic Steroid Users, Am J Psychiatry 2006; 163:697–703)

Gene Tremblay, Assessing Employer Attitudes Toward Hiring Individuals With Mental Disabilities, Thesis, The Graduate College, University of Wisconsin-Stout, May 2001

Gibson RC, Abel WD, White S, Hickling FW. Internalizing stigma associated with mental illness: findings from a general population survey in Jamaica. Rev Panam Salud Publica. 2008; 23(1):26–33.

Godan, A., The Attitudes and Sterotypes of Supporting Fields towards the Persons with Disabilities, Coll. Antropol. 32 (2008) 3: 783–791

Gökhan Özer and Emine Yilmaz, Comparison of the theory of reasoned action and the theory of planned behavior: An application on accountants' information technology usage, African Journal of Business Management Vol. 5(1), pp. 50-58, 4 January, 2011

GORO TANAKA, Effects of an educational program on public attitudes towards mental illness, Psychiatry and Clinical Neurosciences (2003), 57, 595–602

Hani Hamed Dessoki, Tamer M.S., Beliefs about Mental Illness among University Students in Egypt, Europe's Journal of Psychology 1/2009

Harasym, M.T., *The golden section and attitudes towards mental illness: how does stigma influence golden section ratings?* Thesis, The state university of New York at new Paltz, 2008

Helen Lazaratou, et al., Parental attitudes and opinions on the use of psychotropic medication in mental disorders of childhood, Annals of General Psychiatry 2007, 6:32

Helle Wessel Andersson, The effects of individual factors and school environment on mental health and prejudiced attitudes among Norwegian adolescents, Soc Psychiat Epidemiol, DOI 10.1007/s00127-009-0099-0

Henry C, Gay C: Maladie maniaco-dépressive ou troubles bipolaires. Encyclopédie Orphanet, janvier 2004

Jacinta OA Tan , *Psychiatrists' attitudes towards autonomy, best interests and compulsory treatment in anorexia nervosa: a questionnaire survey*, Child and Adolescent Psychiatry and Mental Health 2008, 2:40

Jennifer Hill, Attitudes Toward Mental Disorders Among College Students, UW-L Journal of Undergraduate Research VIII (2005)

John P. Gass, *The knowledge and attitudes of mental health nurses to electro-convulsive therapy,* Journal of advanced nursing 1998, 27, 83-90

JOHN N. CHAPPEL,et al., Physician Attitudes Toward Distressed Colleagues, West J Med 134:175-180, Feb 1981

Joseph Edward Bullock, Jr, Mental Health and Substance Abuse Professionals. Attitudes Toward Dually Diagnosed Clients in a Community-Based Treatment Center, Thesis, Virginia Polytechnic Institute and State University, Northern Virginia Campus Falls Church, Virginia, March 21, 2002

Kapungwe, A. et al., Mental illness - stigma and discrimination in Zambia, African Journal of Psychiatry 2010;13:192-203

Karlawish, J., Older Adults' Attitudes Toward Enrollment of Noncompetent Subjects Participating in Alzheimer's Research, Am J Psychiatry 2009; 166:182–188

Karolinska Institutet, PUBLIC ATTITUDES TOWARDS MENTAL ILLNESS AND PEOPLE WITH MENTAL ILLNESS LIVING IN SWEDEN, Torbjörn Högberg, 20100

Kazantzis, N. et al.: *Public attitudes toward people with mental illness in New Zealand, 1995-1996.* Australian Journal of Rehabilitation Counselling Volume 15 Number 2 2009 pp. 74–91

KAZUYOSHI YAMAMOTO, et al., *Attitudes of medical students towards persons with mental disorders: A comparative study between Japan and Thailand*, Psychiatry and Clinical Neurosciences(1996), 50, 171-180

Kelly N. Gable , A Mental Health Elective to Improve Pharmacy Students' Perspectives on Mental Illness, American Journal of Pharmaceutical Education 2011; 75 (2) Article 34

Kohn, R., Attitudes towards mental illness in the Commonwealth of Dominica, Rev Panam Salud Publica/Pan Am J Public Health 7(3), 2000

Lam et al. Mental health first aid training for the Chinese community in Melbourne, Australia: effects on knowledge about and attitudes toward people with mental illness International Journal of Mental Health Systems 2010, 4:18

Lambert, E.G., David N.Baker, Ventur,L. A, *Preliminary Study of Views toward the Mentally Ill and the Criminal Justice System: A Survey of College* Students. Journal of Criminology and criminal Justice Research and Education, Volume 2, Issue 1, 2008

LAUREL A. ALEXANDER1 & BRUCE G. LINK, The impact of contact on stigmatizing attitudes toward people with mental illness, Journal of Mental Health (June 2003) 12, 3, 271 – 289

Lesley M. Roberts,Andrea Roalfe, Effects of Exposure to Mental Illness in Role-Play on Undergraduate Student Attitudes, Fam Med 2008;40(7):477-83

Linden M.A., Redpath S.J., A comparative study of nursing attitudes towards young male survivors of brain injury: A questionnaire survey, International Journal of Nursing Studies 48 (2011) 62–69

Lisa Mori **et al., Perceptions of Mental Illness and Psychotherapy in a Sample of Asian, Hispanic, and White American College Students, Journal of Psychiatry, psychology and mental health,** Volume 1, Issue 2, 2007

M. ten Have, Are attitudes towards mental health help-seeking associated with service use? Results from the European Study of Epidemiology of Mental Disorders, Soc Psychiat Epidemiol (2010) 45:153–163

Mackenzie C.S. et al., Older Adults' Help-Seeking Attitudes and Treatment Beliefs Concerning Mental Health Problems, Am J Geriatr Psychiatry 2008; 16:1010–1019

Magliano, L., Beliefs About Schizophrenia in Italy: A Comparative Nationwide Survey of the General Public, Mental Health Professionals, and Patients' Relatives, Can J Psychiatry, Vol 49, No 5, May 2004

Mahlalele, S. M. & Osiki, J. O., **A Survey Study on the Stigmatization of the Mentally-ill: The case of HA Leqele, Lesotho, Southern Africa ,** Ozean Journal of Social Sciences 2(3), 2009

Malcolm Boyle, et al., Attitudes Towards Patients by Undergraduate Health Students

MARY TUCK AND DAVID RILEY,The Theory of Reasoned Action:A Decision Theory of Crime

Mas,A. , A Hatim, Stigma in Mental Illness: Attitudes of Medical Students Towards Mental Illness, Med J Malaysia Vol 57 No 4 December 2002

MASAYO UJI, Egalitarian sex role attitudes among Japanese human service professionals: Confirmatory factor analytic study, Psychiatry and Clinical Neurosciences (2006), 60, 296–302

MASAYO UJI, Rape Myth Scale: Factor structure and relationship with gender egalitarianism among Japanese professionals, Psychiatry and Clinical Neurosciences (2007), 61, 392–400

MATTHIAS C. ANGERMEYER, Emotional reactions to people with mental illness, Epidemiologia e Psichiatria Sociale, 19, 1, 2010

Health Service Executive, Mental Health in Ireland: Awareness and Attitudes, 2007

MICHAEL PARROTT, NEWS FRAMES AND ATTITUDES TOWARD MENTAL ILLNESS, A THESIS, The University of Alabama, 2010

Michelle L. West. Et al., Prevalence of Internalized Stigma among Persons with Severe Mental Illness, Stigma Research and Action, Vol 1, No 1, 54–59 2011

Minas, H. et al., *Attitudes of Malaysian general hospital staff towards patients with mental illness and diabetes,* BMC Public Health; 2011, 11:317

Mohammed Kabir, et al., *Perception and beliefs about mental illness among adults in Karfi village, northern Nigeria,* BMC International Health and Human Rights, 2004, 4:3

Moradi, B., Risco C., Perceived Discrimination Experiences and Mental Health of Latina/o American Persons, Journal of Counseling Psychology 2006, Vol. 53, No. 4, 411–421

NAOKO ISHIGE, AND NAOKI HAYASHI, Occupation and social experience: Factors influencing attitude towards people with schizophrenia, Psychiatry and Clinical Neurosciences (2005),59, 89–95

Nazish Imran, et al., A survey of public familiarity, knowledge and attitude towards epilepsy in Lahore, Pakistan, Pak J Neurol Sci 2011; 6(1): 1 – 6

Husband, N., Digby Tantam, Attitudes to self-injury within a group of mental health staff, British Journal of Medical Psychology (2000), 73, 495–504

Mehta, N., et al., Public attitudes towards people with mental illness in England and Scotland, 1994 -2003 , The British Journal of Psychiatry (2009) 194, 278–284.

Gureje, O., et al., Community study of knowledge of and attitude to mental illness in Nigeria, British Journal Of Psychiatry (2005), 186 : 436-441.

Paquin L., *Attitudes du personnel soignant à l'egard des personnes atteintes du SIDA : impact d'un programme de sensibilisation*, Santé mentale au Québec, vol. 19, n° 2, 1994, p. 191-209.

Pinar, Ay, et al., *Does stigma concerning mental disorders differ through medical education? A survey among medical students in Istanbul*, Soc Psychiatry Psychiatr Epidemiol (2006) 41: 63–67

Rabkin, J., Public attitudes toward mental illness: a review of the literature, SCHIZOPHRENIA BULLETIN, ISSUE NO. 10, FALL 1974

Ryoko, S., Knowledge and attitude towards suicide among medical students in Japan: Preliminary study, Psychiatry and Clinical Neurosciences (2006), 60, 558–562

Sadik S.et al., *Public perception of mental health in Iraq*, International Journal of Mental Health Systems 2010, 4:26

Segal, D.L., Beliefs about mental illness and willingness to seek help: A cross-sectional study, Aging & Mental Health, July 2005; 9(4): 363–367

Sévigny, R., et al., Attitudes Toward the Mentally Ill in a Sample of Professionals Working in a Psychiatric Hospital in Beijing(China), Int J Soc Psychiatry 1999 45: 41

Sakamoto, S., Sociopsychological factors relating to suicide prevention in a Japanese rural community: Coping behaviors and attitudes toward depression and suicidal ideation, Psychiatry and Clinical Neurosciences (2006), 60, 676–686

Stacy, A.W., et al., Attitudes and Health Behavior in Diverse Populations: Drunk Driving,
Alcohol Use, Binge Eating, Marijuana Use, and Cigarette Use, Health Psychology 1994, Vol. 13, No. 1, 73-85

Surgenor L.J., Attitudes toward seeking professional psychological help, New Zealand Journal of Psychology, 1985, 14, 27-33

SU£EK J. et al. Attitude toward alcoholics and their families, JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY 2006, 57, Supp 4, 349.358

Tadashi Haraguchi, Attitudes of Japanese psychiatrists toward forensic mental health as revealed by a national survey, Psychiatry and Clinical Neurosciences 2011; 65: 150–157

Tan,Susan MK *Does Clinical Exposure to Patients in Medical School Affect Trainee Doctors' Attitudes Towards Mental Disorders and Patients?* · A Pilot Study. Med J Malaysia Vol 60 No 3 August 2005

Taylor S.M., Michael J. Dear, Scaling Community Attitudes Toward the Mentally III, SCHIZOPHRENIA BULLETIN, VOL. 7, NO. 2, 1981

Toshiyuki Kurihara, Public attitudes towards the mentally ill: A cross-cultural study between Bali and Tokyo, Psychiatry and clinical Neurosciences (2000), 54, 547 – 552

Tsang, H. W. H., Chan, F., & Chan, C. C. H. (2004). *Factors influencing occupational therapy students' attitudes toward persons with disabilities*: A conjoint analysis. American Journal of Occupational Therapy, 58, 426–434.

Tsvi Fischel, *Does a Clerkship in Psychiatry Contribute to Changing Medical Students' Attitudes Towards Psychiatry*?, Academic Psychiatry 2008; 32:147–150

ÜÇOK ALP, Attitudes of psychiatrists toward patients with Schizophrenia, Psychiatry and Clinical Neurosciences (2004), 58, 89–91

ÜÇOK ALP, The impact of antistigma education on the attitudes of general practitioners regarding schizophrenia, Psychiatry and Clinical Neurosciences (2006), 60, 439–443

Wagner, L.C. et al. *Mental health care: perceptions of people with schizophrenia and their carers*, Ciência & Saúde Coletiva, 16(4):2077-2087, 2011

YAMADA M.,et al., Investigation of nursing students' attitudes toward people with mental disorders, A comparative study of Thailand and Japan, 山梨医大紀要 第18巻, 69－75（2001）

Yeap R, Low W Y, Mental health knowledge, attitude and help-seeking tendency: a Malaysian context, Singapore Med J 2009; 50(12): 1169-1176

Wolff G., Community attitudes to mental illness, British Journal of Psychiatry (1996), 168, 183-190

Ymara Lúcia Camargo Vitoloa, ET AL., Parental beliefs and child-rearing attitudes and mental health problems among school children, Rev Saude Publica 2005; 39(5)

Yosjio Mino, et al., Effects of Medical education on attitudes towards mental illness among medical students: a five-year Follow-up study, Acta Med Okayama 2000; 54(3): 127 - 132

Zahid Javed et al., *Attitude of the university students and teachers towards mentally ill, in Lahore, Pakistan*, J Ayub Med Coll Abbottabad 2006; 18(3)

APPENDIX

COMMUNITY ATTITUDES TOWARD MENTAL ILLNESS (CAMI) SCALE

	1.	As soon as a person shows signs of mental disturbance, he should be hospitalized.	1 SA	2 A	3 NO	4 D	5 SD
	2.	More tax money should be spent on the care and treatment of the mentally ill.	1 SA	2 A	3 NO	4 D	5 SD
	3.	The mentally ill should not be isolated from the rest of the community	1 SA	2 A	3 NO	4 D	5 SD
	4.	The best therapy for many mental patients is to be part of a normal community	1 SA	2 A	3 NO	4 D	5 SD
	5.	Mental illness is an illness like any other	1 SA	2 A	3 NO	4 D	5 SD
	6.	The mentally ill are a burden on society	1 SA	2 A	3 NO	4 D	5 SD
	7.	The mentally ill are far less of a danger than most people suppose	1 SA	2 A	3 NO	4 D	5 SD
	8.	Locating mental health facilities in a residential area downgrades the neighborhood.	1 SA	2 A	3 NO	4 D	5 SD
	9.	There is something about the mentally ill that makes it easy to tell them from normal people	1 SA	2 A	3 NO	4 D	5 SD
	10.	The mentally ill have for too long been the subject of ridicule	1 SA	2 A	3 NO	4 D	5 SD

	11.	A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered	1 SA	2 A	3 NO	4 D	5 SD
	12.	As far as possible mental health services should be provided through community based facilities	1 SA	2 A	3 NO	4 D	5 SD
	13.	Less emphasis should be placed on protecting the public from the mentally ill	1 SA	2 A	3 NO	4 D	5 SD
	14.	Increased spending on mental health services is a waste of tax dollars	1 SA	2 A	3 NO	4 D	5 SD
	15.	No-one has the right to exclude the mentally ill from their neighborhood	1 SA	2 A	3 NO	4 D	5 SD
	16.	Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great	1 SA	2 A	3 NO	4 D	5 SD
	17.	Mental patients need the same kind of control and discipline as a young child	1 SA	2 A	3 NO	4 D	5 SD
	18.	We need to adopt a far more tolerant attitude toward the mentally ill in our society	1 SA	2 A	3 NO	4 D	5 SD
	19.	I would not want to live next door to someone who has been mentally ill	1 SA	2 A	3 NO	4 D	5 SD
	20.	Residents should accept the location of mental health facilities in their neughbourhood to serve the needs of the local community	1 SA	2 A	3 NO	4 D	5 SD
	21.	The mentally ill should not be treated as outcasts of society	1 SA	2 A	3 NO	4 D	5 SD

	22.	There are sufficient existing services for the mentally ill	1 SA	2 A	3 NO	4 D	5 SD
	23.	Mental patients should be encouraged to assume the responsibilities of normal life	1 SA	2 A	3 NO	4 D	5 SD
	24.	Local residents have good reason to resist the location of mental health services in their neighborhood	1 SA	2 A	3 NO	4 D	5 SD
	25.	The best way to handle the mentally ill is to keep them behind locked doors	1 SA	2 A	3 NO	4 D	5 SD
	26.	Our mental hospitals seem more like prisons than places where the mentally ill can be cared for	1 SA	2 A	3 NO	4 D	5 SD
	27.	Anyone with a history of mental problems should be excluded from taking public office	1 SA	2 A	3 NO	4 D	5 SD
	28.	Locating mental health services in residential neighborhoods' does not endanger local residents	1 SA	2 A	3 NO	4 D	5 SD
	29.	Mental hospitals are an out-dated means of treating the mentally ill	1 SA	2 A	3 NO	4 D	5 SD
	30.	The mentally ill don't deserve our sympathy	1 SA	2 A	3 NO	4 D	5 SD
	31.	The mentally ill should not be denied their individual rights	1 SA	2 A	3 NO	4 D	5 SD
	32.	Mental health facilities should be kept out of residential neighbourhoods	1 SA	2 A	3 NO	4 D	5 SD
	33.	One of the main causes of mental illness is a lack	1	2	3	4	5

		of self-discipline and will power	SA	A	NO	D	SD
	34.	We have a responsibility to provide the the best possible care for the mentally ill	1 SA	2 A	3 NO	4 D	5 SD
	35.	The mentally ill should not be given any responsibility	1 SA	2 A	3 NO	4 D	5 SD
	36.	Residents have nothing to fear from people coming into their neighbourhood to obtain mental health services.	1 SA	2 A	3 NO	4 D	5 SD
	37.	Virtually anyone can become mentally ill	1 SA	2 A	3 NO	4 D	5 SD
	38.	It is best to avoid anyone who has mental problems.	1 SA	2 A	3 NO	4 D	5 SD
	39.	Most women who were once patients in a mental hospital can be trusted as a baby sitters.	1 SA	2 A	3 NO	4 D	5 SD
	40.	It is frightening to think of people with mental problems living in residential neighborhoods'	1 SA	2 A	3 NO	4 D	5 SD

II. DEMOGRAPHIC DATA QUESTIONNIARE

1. What is your Gender ? 1. Male 2. Female

2. What is your age? …….

3. What is your family status? 1. Single 2. Married 3. Divorced 4. Separated

5. Widower

4. What is the highest level of education that you have completed?

A. Elementary school B. High School C. Some College/Special Training D. Bachelor.s Degree E. Master.s + F. Unclassified

5. What is your role? 1. Administrative 2. Social worker 3. Guide 4. Housekeeper 5. Volunteer 6. Nurse 7. Chief Nurse 8. Doctor 9. Psychologist

6. What is your background?

1. former consumer 2. Relative of a consumer 3. A friend of a consumer 4. N/A

7. How many years of experience do you have providing direct services to clients?

_____ Years

8. How many years of experience do you have working in a supervisory level position or higher?

_____ Years

9. Should we ask the persons with mental illness about their preferences? Yes------ No------

10. Who should be involved in the decision-making regarding personal programs for persons with mental illness?'

i. Staff member
ii. Staff member and the consumers
iii. Staff member, consumers and their families
iv. Persons with psychiatric disabilities